

Utilities: Toward
More Productive
Computing-p. 22

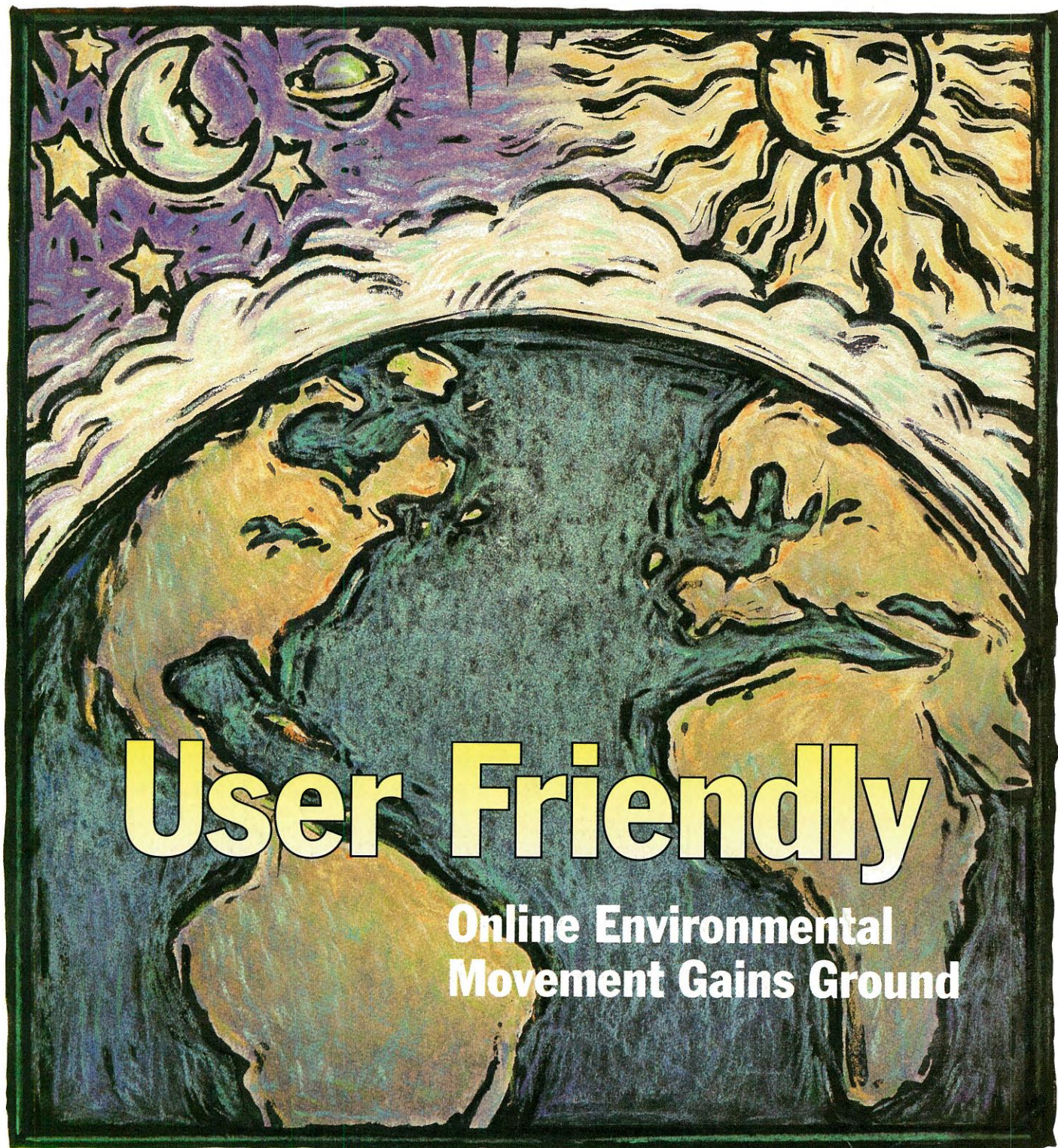
Surviving an IRS
(Yow!) Audit-p.32

Ebert, Live and
in Forums-p.42

FEBRUARY 1992 \$2.50

COMPU SERVE

M A G A Z I N E



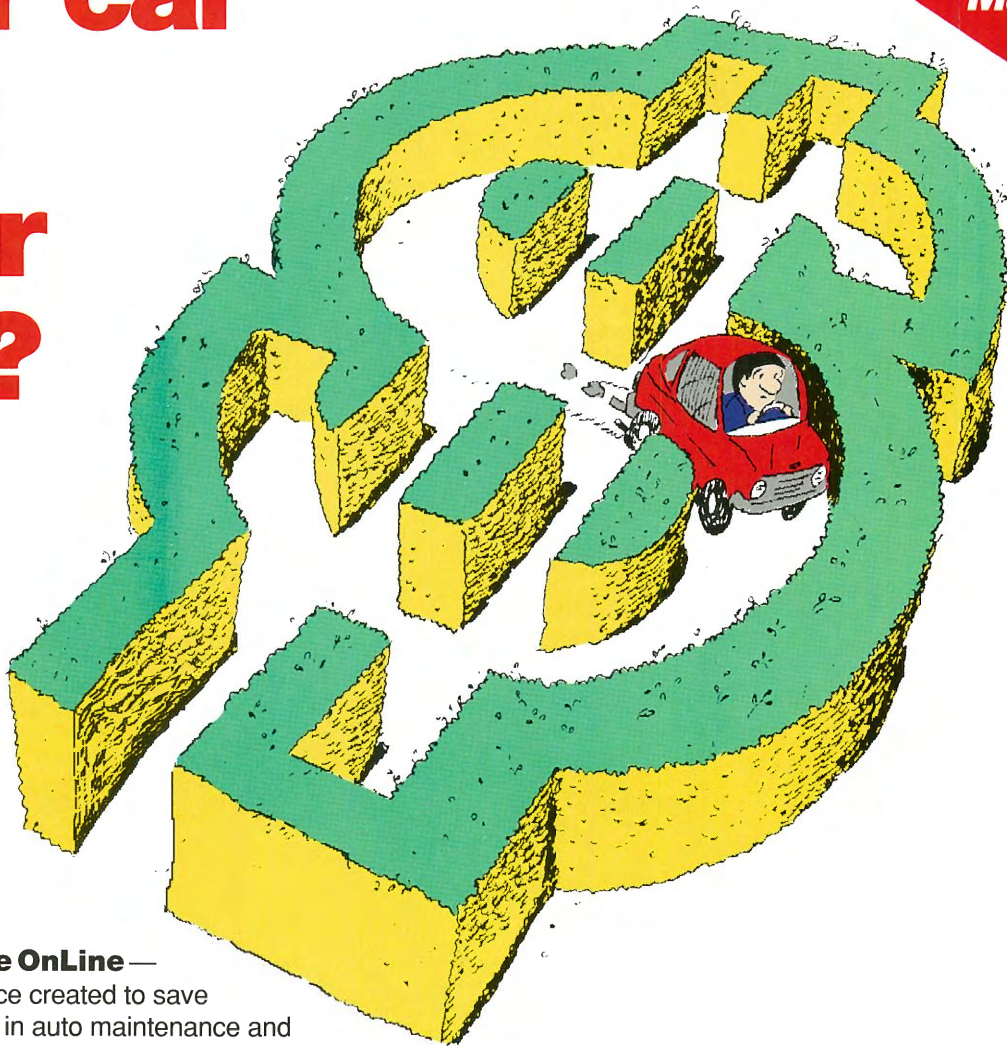
User Friendly

Online Environmental
Movement Gains Ground

**New to the
Electronic
Mall!**

Is your car taking you for a ride?

**Start saving
now with
AutoVantage
OnLine® —
3 months
for just \$1.***



Introducing AutoVantage OnLine —

It's a membership-based service created to save you hundreds of dollars a year in auto maintenance and repairs — and even thousands of dollars when you purchase a new car. Here are some of the many money-saving benefits it includes:

- **Discounts and Savings on Service or Repairs** at thousands of participating dealers and service centers, including Goodyear®, Firestone®, AAMCO®, Maaco®, and KmartSM — all listed in the computerized AutoVantage OnLine Service Center Locator.
- **Free New Car Summaries and Used Car Valuations**, which can be ordered online, giving you all the data you need for buying or selling at the best available price, including dealer invoice prices, estimated wholesale retail values, resale projections and operating expenses, performance reports, recall history — and more.
- **Savings From \$50 to \$5,000 Off New Car List Prices** on all domestic models and most foreign makes — at participating New Car Dealers, nationwide.**

Put yourself in the driver's seat and see how much money you can save. As a CompuServe subscriber, you can "test drive" AutoVantage OnLine for three months for just \$1. Just sign on to CompuServe — Enter GO ATV or find AutoVantage OnLine on the Electronic Mall Menu. Or, call toll free 1-800-843-7777.

Join the biggest — and the best.

CompuServe®
AutoVantage®
O n L i n e

* Full terms and conditions can be read online.

Normal connect-time fees will be billed by CompuServe.

** Actual savings may vary depending upon the make and model you choose, and other factors.

© 1991, CUC International Inc.

GO OLI for more information.

CSOAA1



Van B. Hooper
President of Hooper International
and Author of Hooper Software

I'll Show You How To Increase Your Income and Manage Your Money Like a Financial Whiz!

*I PERSONALLY GUARANTEE COMPLETE SUCCESS
WITH MY FREE UNLIMITED TELEPHONE SUPPORT
AND NINETY DAY REFUND OFFER.*

**NOW, SAVE THOUSANDS OF DOLLARS
A YEAR IN ACCOUNTING FEES AND
AVOID I.R.S. AUDITS WITH THIS USER
FRIENDLY CHECK WRITING AND
ACCOUNTING SOFTWARE.**

Most Executives, Professionals and Business Owners simply don't have the time to learn the necessary accounting principals for effective management of their affairs. On top of it all, the I.R.S. makes endless demands for more comprehensive records.

With Hooper Accounting Packages, you are immediately more productive. All you have to do is follow the easy-to-understand instructions. You control your finances instead of allowing your finances to control you. This enables you to spend more time at what you do best — **Making Money!**

Hooper packages are inexpensive and are written in plain, simple, language. A friendly and helpful support staff is always available to courteously answer any and all of your questions, free of charge. Hooper takes the mystery and awe out of using accounting software!

Take advantage of the 90 day free trial offer today. You have all to gain and nothing to lose. Act now!

***"Hooper Software Does Much More Than Quicken,
Is More Powerful Than Paciolli and is
Immensely More Easy To Use Than Dac Easy."***

90 DAY FREE TRIAL.

YOUR GUARANTEE OF SATISFACTION!

Your absolute satisfaction is our number one priority. That's why we invite you to try Hooper Software for a full 90 days without risk or obligation. If you are not completely satisfied, you can return the software for a full and cheerful refund. No questions asked.

**WE SHIP
ALL ORDERS BY**



Copyright 1992 by Excel American and Hooper International, Inc.
Cheque-It-Out, Takin' Care Of Business! and Payroll-Master are trademarks of
Hooper International, Inc.
IBM, Quicken, Paciolli and Dac Easy are trademarks of their respective owners.
All Hooper software operates with IBM PC-DOS or compatible computers.
Specify 5-1/4" or 3-1/2" floppy disk.

**"Americas No. 1
Check Writing and
Accounting Software
For Non Accountants."**

FREE 90 DAY TRIAL OFFER!



CHEQUE-IT-OUT™

The user friendly personal accounting software that helps you manage your affairs with complete accuracy. Ideal for executives, professionals and small business.



Sample Listing of Hundreds of Cheque-It-Out Features:

- Works under Windows or DOS.
- Handles and feels like your checkbook.
- Know your account balances at all times.
- No accounting experience necessary.
- Full general ledger.
- Automated Double Entry System.
- Complete range of reports instantly available.
- Intuitive pop up windows.
- Mouse compatible.
- Over 3,000 screen color selections.
- Unlimited transactions.
- Context sensitive help screens.
- Tracks outstanding checks.
- Pop-up calculator.
- Operates in calendar or fiscal year mode.
- Unlimited free telephone support.

Only \$69.95

Plus \$5 Shipping & Handling



TAKIN' CARE OF BUSINESS!™

The simple-to-use software that will help you succeed in business. It will enable you to operate more efficiently and effectively, improving your bottom line.

Includes All Features of Cheque-It-Out Above, Plus:

- Leading Edge Accounts Receivable Operating & Reporting Package.
- Advanced Accounts Payable Operating & Reporting Package.
- No accounting experience necessary.
- Unlimited free telephone support. And much more.

Only \$149.95

Plus \$6 Shipping & Handling

PAYROLL-MASTER™

Provides everything you need to professionally manage your payroll function.

Sample Listing of Dozens of Payroll-Master Features:

- Designed to be fully compatible with all other Hooper software.
- Automatic Tax Collections.
- Prints W-2's and 1099's.
- No accounting experience necessary.
- Manages employee vacations, sick time, overtime and holidays.
- Supports up to 1,000 employees.
- Unlimited free telephone support.

Only \$69.95

Plus \$5 Shipping & Handling

**ORDER TOLL-FREE
1-800-525-9200**



or send check or money order to:

HOOPER INTERNATIONAL, INC.

"The Accounting People"

**P.O. Box 49711, Dept. 10
Colorado Springs, CO 80949, USA**

CONTENTS

FEATURES

Feature Story

10 Telecommunications Comes Down to Earth

With the quandary of our planet's sustainability coming more to the fore, ecologically minded members use the online medium to explore the complex issues and fundamental questions of environmentalism, and to advocate awareness within their own hobbies and professional fields. Includes: Networking eco-groups Greenpeace and Sierra Club; a new Gardening Forum; green references and downloadables.

Computing Services

22 Truly Utile

Personal computing might darn well be impossibly intricate and unbearable were it not for utilities, those file recovery, disk managing and diagnostic programs that fill in the cracks between applications and give your productivity a boost. Plus: A downloading primer; popular files; Peter Norton Q&A.

29 Exploding Mice: Exploding in usage and designs, that is. We look at the screen selection device and its state-of-the-art purveyor, Logitech. Also: Logitech files.

Money Matters

32 A Taxing Time

It's not a lottery you want to win by any means, but being selected for an IRS audit doesn't have to be the sweat-riddled trip under the microscope most think it is. CompuServers who've been through it tell what to expect and how to prepare. Also: Tax preparation programs; the IRS' idea of a home office.

Travel

38 Rapids of No Return

"Pure Screaming Hell" may not sound like much of a destination spot (it's probably what you're trying to get away from), but rafting this watery abyss on West Virginia's turbulent Gauley River and similar stretches is like one big natural amusement park. Plus: Whitewater tips and files.

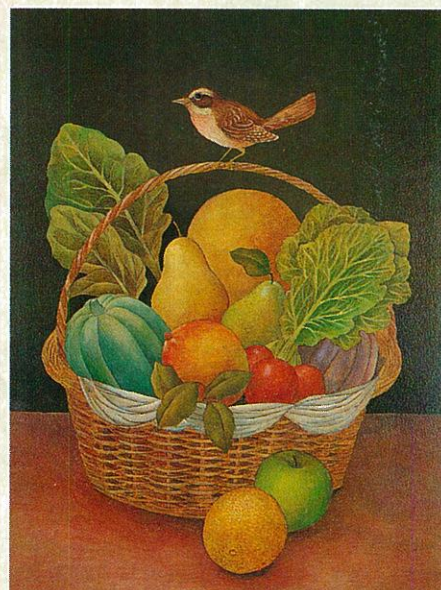
Personal Business

42 Let's Review

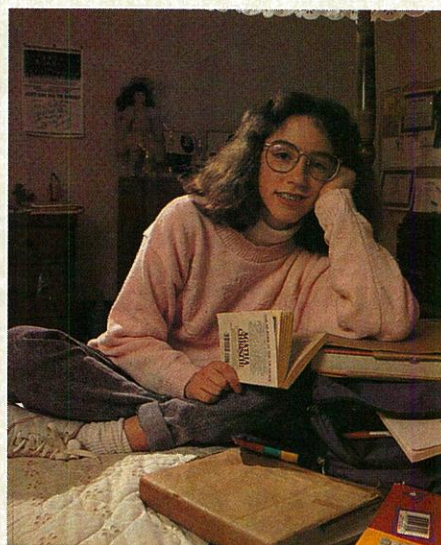
On television he's half of the often antagonistic and conceivably most powerful film review team to ever extend its thumbs in approval or demerit. But Roger Ebert, on several CompuServe forums and in his own online database of critiques, stands alone as "an ideal member" of the moviegoing public. Plus: Ebert's online haunts.

45 Whiz Kids: You'd think they'd be mischievous, but CompuServe's younger set maintains a dignified presence. Plus: Their hideout, Gamers' Forum.

49 Sniper! Goes Graphic: Losing the ASCII enemies, the World War II battleground game gets a high-resolution color interface. Plus: Creator Steve Estvanik.



Online environments and real ones—p. 10



Young stuff with User IDs—p. 45

Too Hot to Print

► Catch computer industry news as it happens, read special reports, commentary and more product reviews. You'll find it only in *Online Today*, a daily updated newspaper.

Behind the Screens	OLT-130
CompuServe This Week	OLT-50
Online Today Guide	OLT-351
Product Reviews	OLT-200
File Listing Updates	OLT-600
Today's News	OLT-90

DEPARTMENTS

3	Dear Reader
4	Letters
6	Monitor

52	Hardware and Software Reviews
54	Book Reviews
56	Update: Last-Minute News

CompuServe Magazine (ISSN 0891-4672) is published monthly in the United States of America by CompuServe Incorporated, 5000 Arlington Centre Blvd., Columbus, OH 43220. Canadian GST registration No. R127010582.

COMPU SERVE

M A G A Z I N E

CompuServe® Magazine™, February 1992

Volume 11 Number 2

Publisher

Calvin F. Hamrick III

Editorial Director

Richard A. Baker

Editor

Douglas G. Branstetter

Art Director

Thom Misiak

Managing Editor

Kassie Rose

Senior Editor

Mary Mitchell

Assistant Editors

Christopher J. Galvin, Michele D. Kinnamon

Design Coordinator

Dorothy Hogan

Production Coordinator

Drew W. Holland

Senior Writer

Cathryn Conroy

Contributing Editors

Charles E. Bowen, Hardin Brothers,

John Edwards, Holly G. Miller,

Michael Naver, Mike Pietruk,

Ernest E. Mau 1982-1990

Copy Editor

Kacy Cook

Proofreaders

Christine Harrington, Estelle Silbermann

Photocomposition Coordinator

Susan Toombs

Production Assistant

Jody Myers

Editorial Assistant

Bobbi Dominick

ADVERTISING

Associate Publisher

Peter A. Scott, 5000 Arlington Centre Blvd.,
Columbus, OH 43220; 614/457-8600; 70003.3731

National Sales Manager/Electronic Mail

Keith Arnold

614/457-8600

Mid Atlantic

Jennifer Stothers

212/486-2440

New England and Southeast

David Koeneman

614/457-8600

Midwest and West

Tom Emmons

614/457-8600

EUROPEAN OFFICES

United Kingdom

15/16 Lower Park Row

PO Box 676

Bristol BS99 1YN

Tel. 0800 289 458 (free inside UK)

(44) 272 255111 (outside UK)

Germany

CompuServe GmbH

Jahnstrasse 2

D-8025 Unterhaching/Munich

Tel. 0130-3732 (Sales, freephone within Germany)

0130-4643 (Support, freephone within Germany)

155 31 79 (free inside Switzerland)

(49) 89-66550-222 (outside Germany and Switzerland)

CompuServe User ID number: 70006.101



President and Chief Executive Officer, Maurice A. Cox; **Executive Vice President, Information Services**, Barry F. Berkov; **Executive Vice President, Support Services and Chief Technical Officer**, Alexander B. Trevor; **Executive Vice President, Network Services**, Robert J. Massey; **Senior Vice President, Market Planning and Development**, John E. Meier; **Vice President, Product Marketing**, David Eastburn; **Vice President, Human Resources**, Judy S. Reinhard; **Vice President, Administration**, Herbert J. Kahn.

Copyright©1992 by CompuServe Incorporated, an H&R Block Company. All rights reserved. Contents may not be reproduced in whole or in part without written permission of publisher. *CompuServe Magazine* (ISSN 0891-4672) is a registered trademark of CompuServe Incorporated. Printed in USA by R.R. Donnelley & Sons Co., Chicago. Subscriptions: United States, AFO—\$30 one year; Canada and elsewhere \$40 one year. Single copies \$2.50 in US, AFO and Canada. Telephone: 614/457-8600. *CompuServe Magazine* assumes no responsibility for return or safety of unsolicited matter. Direct editorial correspondence to: Editor, *CompuServe Magazine*, P.O. Box 20212, Columbus, OH 43220.

Dear Reader

In recent months *CompuServe Magazine* has examined a few of the different ways people use the online medium as a tool for grassroots activism and social engineering. The online community continues to expand and redefine this new brand of activism we call "modemocracy." One of the more vibrant movements under modemocracy's wing is environmentalism—the subject of this month's cover feature.

Perhaps the most promising aspect of this emerging ecological activism is that its thousands of participants from all over the world are discussing options, exchanging information and organizing efforts online. If local involvement is important, then an ongoing, worldwide plenum on a problem that knows no borders is essential.

One of the more visible ecology-minded entities on CompuServe is Turner Broadcasting's Network Earth Forum, an online companion to the Network Earth television program. Network Earth is covering events at the June 1992 "Earth Summit" in Rio de Janeiro, Brazil. A "leaf mailgram" project associated with the Summit encourages everyone concerned about the environment to send in a symbolic leaf to cover "Trees of Life" stationed near the Summit site in Rio. (A copy also goes to President Bush at the White House, encouraging the administration to support international agreements that establish timetables to limit carbon dioxide emissions—one of the greenhouse gases.) CompuServers will be able to send in their "leaves" electronically by using the EARTHgram service (details on page 14).

Other environmental groups, savvy to the power of the medium, are also coming aboard under the umbrella of the Network Earth Forum. Two well-known organizations, the Sierra Club (see p. 12) and Greenpeace (p. 15) now operate sections in Network Earth.

Relative newcomers are joining pro-environmental standbys that can be found in the Outdoor Forum, Safetynet, the Gardening Forum (formerly the Good Earth Forum) and in certain sections of many other forums where one would least expect to find ecology discussions. Learn about light pollution in the Astronomy Forum; discover environmentally responsible ways to deal with darkroom chemicals in the Photography Forum; find out what you can do about the plight of endangered reptiles in the Pets Forum; educate yourself on the hazards of lead-based wine bottle wrappers in the Wine Forum...the list is surprisingly long and varied.

We encourage you to explore all the options beginning on page 10.

* * *

An environmental issue begs the obvious question, "What does *CompuServe Magazine* do to protect the planet?" For a magazine, the first concern is the paper it is printed on.

At present, there are no reliable supplies of recycled paper on which to print *CompuServe Magazine* at the volume we require. Nevertheless, CM production managers are always searching for recycled, uncoated paper stock alternatives and expect to make a switch in the near future as recycled paper manufacturing techniques advance and reproduction performance improves.

CompuServe Magazine's printer, R.R. Donnelley & Sons Co., is always testing recycled paper stock in cooperation with paper companies attempting to develop reliable alternatives. Donnelley deals with paper suppliers who plant, on average, three trees for every tree harvested. Donnelley also recycles all its bindery trim and wastepaper—about 350,000 tons a year. The inks, solvents and electroplating chemicals and metals used in the printing process are also recovered and recycled.

At CM's editorial offices, all office paper and incoming mail is recycled in a CompuServe company-wide program called "Daily Paper." Photocopying is kept to a minimum, and both sides of the paper are used. Plastics and metals are also recycled under the Daily Paper program, with proceeds used to expand CompuServe's recycling and environmental education program. Naturally, we make extensive use of electronic communication in lieu of paper and petroleum-dependent delivery systems. The magazine has a small on-site editorial staff; we favor use of home-based, free-lance writers and editors who can keep their car in the garage and send their work over telephone lines.

We continue to explore ways of reducing our impact on the planet, and welcome your suggestions. Please write to us by electronic mail at 76004.3302.

Douglas G. Branstetter
Editor

Member Essay Feature

Kirby Timmons' essay (Dec. 1991, p.14) includes a blunder resulting from Groupthink: "Truman's crossing of the 38th parallel that began the Korean War." The Korean War started on June 25, 1950 when the North Korean Army under Kim Il Sung crossed the 38th parallel and invaded South Korea. The United States under President Truman and the United Nations became involved in defending South Korea.

Merv McConnell
Falls Church, Va.

I enjoyed Kirby Timmons' essay describing how he was able to use CompuServe to obtain background information used in producing an educational video on the Challenger disaster. Timmons' argument is that "groupthink" (decision making by group consensus where less forceful individuals may not speak up in order to conform) may have been responsible for the Challenger disaster. He cited examples of groupthink fiascoes, including the "Bay of Pigs, Pearl Harbor, and Truman's crossing of the 38th parallel that began the Korean War."

The last example came as news to me. I had always believed the war began when North Korea crossed the 38th parallel to attack South Korea.

Phil Hannum
Kirkland, Wash.

Congratulations on having the guts and sensitivity to print "A Girl at Heart," an essay by transsexual Terri Main (Dec., p.17). I found Ms. Main's essay to be both well-written and moving.

It's refreshing to see a company such as CompuServe giving recognition to alternate lifestyles, through such mediums as the Human Sexuality Forum and the Alternate Lifestyles Channel in CB Simulator. Other dial-up computer services, with their vanilla flavored, G-rated approach, could learn a big lesson from CompuServe.

John Preziosi
Chicago, Ill.

I find it in poor taste that CompuServe would give dignity to the pursuit of "an exciting new life," as illustrated by the essay "A Girl at Heart."

I appeal to you to be aware that a small percentage of individuals are attempting to bring what the general population considers perverted into respectability. I also request that as a communications company you take seriously the publication of information that may portray you as an advocate of such

lifestyles, even if by association rather than intent.

Ron Scott
Mt. Hermon, Calif.

Offline Gatherings

Please tell whoever did the page layout of the "Offline and in Person" article (Dec. 1991, p.44-45) that they overlapped the Racing Forum photo and covered my picture with another photo from the Photo Forum.

I am a staff reporter for the Racing Forum and am thick-skinned enough to take this, but in the future try not to cut people off. There was plenty of room on the page layout to show all of us, and in fact the left side of the photo had open space as wide as the view that was cut off.

I have been an active member of CompuServe since 1984. It's funny that I got this close to getting my picture in *CompuServe Magazine*—then was covered up.

Bruce Freeburger
Roseville, Mich.

Just as the recent Photo Forum gathering in New York City helped to add a new level of depth to this online medium, one would hope *CompuServe Magazine* would attempt to further the bonds between its members. I got next to no sense of knowing the people in any of the forum photographs, mainly because all the images were reproduced so small.

Having just come from a university journalism school known in part for its dedication to the principles of visual impact in print, I cringe when I see photographs so poorly displayed. They serve little real purpose in a publication when they are not sized for easy comprehension. The intention was good but the execution failed miserably.

Kurt Foss
Madison, Wis.

Online References

From time to time I run across notes and messages in *CompuServe Magazine* about accessing various information online. But when later I want to use such info, I cannot always find the magazine.

Why not print a condensed directory of such info, perhaps twice a year. It would be a great help to all.

Cornel Sarosdy
San Antonio, Texas

Modocracy Letters

As a legislative assistant for a member of the Texas House of Representatives, I take great interest in the letters about making

legislative databases available to the public (Dec. 1991, p.4). Unfortunately, we barely have access to this information ourselves.

While all Texas legislators have complete visual access to filed bills and committee schedules, and can print out this material within our Capitol offices, we cannot download it or access it from our district offices. Since we are in session only a limited amount of time during each two-year cycle, we need to access the information when we are in our districts.

There is currently a project to add computers, presumably with access to the Legislative Information System, to district offices, and there are some plans to upgrade LIS itself.

However, my hunch is that any attempt to let "the public" access this info will be strongly fought by the commercial services that provide it to lobbyists, and by the lobbyists themselves who know all too well that information is power.

Scott Hochberg
Houston, Texas

Clarification

In an article entitled "Dial F for Fraud," (Dec. 1991, p. 32), John Morgan, director of enforcement for the Texas State Securities Board, was presented as "acknowledging" that Kinlaw Securities Corporation was the object of "numerous complaints" from its investors. Morgan did not disclose or enumerate specific complaints filed against Kinlaw, nor did he imply that any legal actions against Kinlaw had been "short circuited" by a consent decree on KSC issued July 3, 1991 by the state securities commissioner. *CompuServe Magazine* did not intend to imply that Kinlaw is or was engaging in illegal activity, only that oil and gas ventures often present considerable risk to investors, and that Kinlaw had agreed to fully disclose those risks to potential investors in the future.

Send a Letter

Send your letter to the editor by CompuServe Mail to 76004.3302. A \$25 connect credit is given to the writer of each letter published. *Sorry, we cannot acknowledge letters or answer questions through this service.* Please use CompuServe's Feedback system (GO FEEDBACK) or call 800/848-8990 for questions, problems, address changes, etc. A representative from Customer Service will be glad to help you.

WORLD'S LARGEST CD CATALOG – ON LINE



ALMOST **FREE** CDs



Steal This Disc 3 - Newsubscribers to our catalog may choose to receive a **free** Rykodisc CD sampler, **Steal This Disc 3**. The 72-minute CD contains

23 tracks, including a song from the new Nils Lofgren release, plus Jimi Hendrix, Jerry Jeff Walker, Frank Zappa, Badfinger, Devo, Country Joe, McGear, David Bowie and more. Regular Price: \$13.99 + S&H. **New Subscribers pay only the \$3.99 S&H Charge.** (55328)

Just add the samplers by putting their codes as a comment on your \$6.00 catalog order.

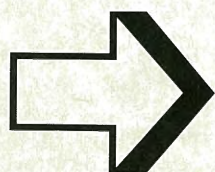
Shanachie First Family Reggae - This 67 minute, 15 cut CD Reggae disc contains songs from your favorite performers. Featuring Bunny Wailer, Rita Marley, Judy Mowatt, Mutabaruka, Alpha Blondy, Eek-A-Mouse, Yellowman and more. Regularly \$13.99, only \$3.99 for S&H when you order on line. (64557)

Teldec Classics International - This 69-minute CD contains 22 tracks. Includes selections from Wagner, Haydn, Mozart, Bach Beethoven and more. Only \$3.99 for S&H when you order on line. (61539)

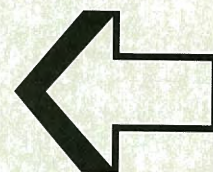
JVC World Sounds Catalog - 40 cuts with music from all over the world. Includes selections from China, Bali, Zaire and more. Regularly \$11.99, only \$3.99 for S&H when you order on line. (49063)

Vienna Master Series Sampler - New from Pilz is an all digital classical CD sampler featuring works by Beethoven, Mozart, Vivaldi, Brahms, Chopin, Verdi, Bach and Bizet. Only \$3.99 for S&H when you order on line. (49073)

Royal Crown Classics Sampler - The Pilz group presents a sampler with superior sound quality, featuring works from Mozart, Wagner, Vivaldi, Chopin, Tchaikovsky and more. Only \$3.99 for S&H when you order on line. (48225)



GO BEM



Bose Express Music is like having the world's largest record store on line. We carry the complete catalog of all the major labels, plus independents like OJC, Chesky, Pausa, Concord Jazz, DMP, GRP, Alligator, Rounder, Riverside, Pablo, Fantasy ...in total, over 1,000 independents.

Ordering from us couldn't be easier. Order on line (GO BEM), by typing GO BEM and you can order our 240 page Catalog or any regularly priced CD listed in our on-line catalog at our sale price, plus only \$3.99 shipping and handling *per order*.

First Order – Free Usage Credits

The first 1000 users who order from Bose Express Music on line will receive free usage credits – GO BEM for details.

GO MALL Menu

The GO MALL menu for Bose Express Music changes each month. Be sure to check it regularly to find: **Best Seller Charts for Rock, Jazz, Classical, Country & Video** plus sales on Boxed Sets, Samplers and Classical Music specials (including Opera). GO BEM for details.

BOSE
Express Music

MONITOR

Desperately Seeking Donations

Fund-raising is an important yet time-consuming aspect of non-profit organizations. While universities and major research organizations such as Easter Seals and the American Cancer Society turn the job over to highly paid professionals, that isn't practical for most of us. Still, we can learn from these groups how to collect money for that local PTA, community or church drive.

In the Legal Forum (GO LAWSIG), Library 0, "General," file FUND.TXT, San Francisco consultant Ron Huddleston assures us that there's nothing magical or mysterious about the process. It is merely selling others on investing in the future of a cause you believe in.

Huddleston's blueprint for success states that an effective campaign is 90 percent organization and only 10 percent solicitation. He surveys popular strategies, explaining why they succeed or fail.

The more personal the approach, the better. For small groups, Huddleston discourages direct-mail appeals and planned special events, which he calls "a big cop-out, rarely producing the income needed, much less expected. They often actually lose money."

He concedes that events can be justified on the basis of community impact, "provided they are well produced and do not consume an inordinate amount of time and energy."



CompuServe's Rising-Sun Cousin Hits Five

NIFTY-Serve, a Japanese-language online service developed under a license granted by CompuServe, recently marked its fifth anniversary.

Modeled after the CompuServe Information Service, NIFTY-Serve has become the largest online service for personal computer users in Japan. NIFTY-Serve offers 220 online forums and 130 databases covering everything from hobbies to business. It can be accessed from 139 points within Japan, 400 US cities and from most major cities worldwide.

NIFTY-Serve is provided by NIFTY Corp., a joint venture of Fujitsu Ltd. and Nissho Iwai Corp. NIFTY Corp. also provides marketing and customer support for CompuServe members in Japan. Freephone within Japan: 0120 22 1200. Outside Japan: (+81) 3-5471-5806.

Shinji Kimura of Tokyo has joined CompuServe's Public Relations and Marketing Forum

(GO PRSIG) as an assistant sysop.

At Dentsu, Japan's largest advertising agency, Kimura specializes in developing communications and promotional strategies for Japanese client companies in the process of entering worldwide markets. He is a member of the Strategic Management Association of Japan and the Tokyo Copywriters Club.

Kimura will keep forum members abreast of marketing and communications news from the Pacific Rim and co-manage the forum's International Section.

CompuServe members in Europe and others who monitor worldwide financial markets now have access to the exchanges in the United Kingdom through a new pricing service.

UK Historical Pricing contains more than one and a half years of pricing information on UK stocks and many UK market indexes. GO UKPRICE for more information.



Like That Would Happen!

What frustrates you most about going to the movies—beyond the high prices and stale popcorn, of course? Members of the ShowBiz Forum (GO SHOWBIZ) recently engaged in the all-American tradition of exchanging pet peeves concerning film producers and directors.

A complaint of many, shared in Library 2, "Motion Pictures," file PEEVE.TH0, is the great liberties taken with reality in order to achieve effect. Forrest Johnson's favorite example of this is the loon laugh, a spooky bird call heard only in northern states near large bodies of water during the warm summer months.

Says Johnson, "In the movies, loons are heard giving their call in the winter, in the desert, Florida, Asian and African countries, and anywhere else you might imagine."

Barracudas are similarly misrepresented, depicted as dangerous man-devouring creatures. Explains Kevin McNichol: "Like humans, they usually don't eat anything not normal to their diet. So, when they see a human, they look at him/her with some curiosity, but not with an eye toward dinner. Since they don't know what people are, they have enough sense not to tangle with them."

Jennifer Mendoza, on the other hand, is turned off by dubbed-in studio dialogue often used over nature scenes. "Instead of concentrating on the scene itself, I start picturing the actors on the sound stage trying to synch their lines with the movie," she says. "That, for me, loses the scene."

Snow News Day

Were you aware that Breckenridge, Colo., offers helicopter skiing for the handicapped? Or did you know that the nearby resort of Vale has 120 ski trails and 20 lifts plus ice skating, sleigh rides, snowmobiling and hot-air ballooning? By accessing "Daily Ski Reports," under Option 8, "Leisure & Discount Travel," of the Official Airline Guides Electronic Edition (GO OAG), you can find current downhill and cross-country skiing conditions for hundreds of slopes and trails across North America and Europe, courtesy of Morrie Trumble and Associates.

You'll also discover resorts in areas not traditionally associated with snow skiing. For example, for milder winter action, try the mountains of western North Carolina and the Appalachian Ski, Beech Mountain, Sugar Mountain or Wolf Laurel resorts. If you're in Washington, D.C., drop by the neighboring Virginia ski areas of Bryce, Massanutten or Wintergreen.

The Kremlin, a Coup and an Exiled Crimefighter

CompuServe members recently had the opportunity to get inside knowledge of the Soviet secret police when the Soviet Crisis Forum (GO USSRFORUM) held a conference with former KGB Colonel Emin Gadziyev.

The former officer was a rising star in the KGB until 1987, when he was forced to leave his country because of an unsuccessful attempt to expose corruption in the ranks.

Now a resident of Florida, Gadziyev was assisted in the online conference by CompuServe member Joe Crankshaw, who translated, and with whom Gadziyev has written a book, *Red Mafia*.

In addition to questions about the past and future of the KGB, members asked about the failed coup attempt, problems faced by the Soviet people and more. A transcript of the conference is in Library 2, "What's Next," file USSRCO.TXT.



PAUL FISCH

MEMBER ESSAY

Orphaned Tune

The local parks and recreation department was putting on a production of the stage musical *Annie*, and I won the part of Daddy Warbucks. I shaved my head to match the look of the comic book character, and the cast logged many long hours of rehearsals. Opening night was a week away, but there was one problem.

The script, set in the midst of the depression, described the characters listening to the radio during several scenes, with specific programs and theme music being played. We found the musical selections and could reproduce the spoken segments, but a singing Jell-o commercial posed the biggest challenge. The lyrics were written out, but there was no music available.

Since I work in radio syndication, I asked several business contacts if they had a copy of the commercial. I made calls to the ad agency in New York, and to the Museum of Broadcasting. It was a fairly well-known jingle, but where could I get a copy—with time running out?

I logged onto CompuServe at midnight after a long rehearsal and went to the Broadcast Professionals Forum. I posted the lyrics of the commercial and asked, nay, *pleaded* for help.

I checked the forum the next day and there was a message waiting for me from a radio producer in New York who had a copy of the commercial! He dubbed a copy and mailed it to me. The show went off without a hitch, I've made a new business acquaintance, and my hair has grown back. Two of the three I can attribute to help from CompuServe.

Nicholas Scott
Redondo Beach, Calif.

Matchless Makers: And the Winners Are...

Hold on to your hats IBMers. According to J.D. Power and Associates, the best computer company is ... Apple.

Apple also grabbed top honors as the best printer company, while Borland International was crowned best software company.

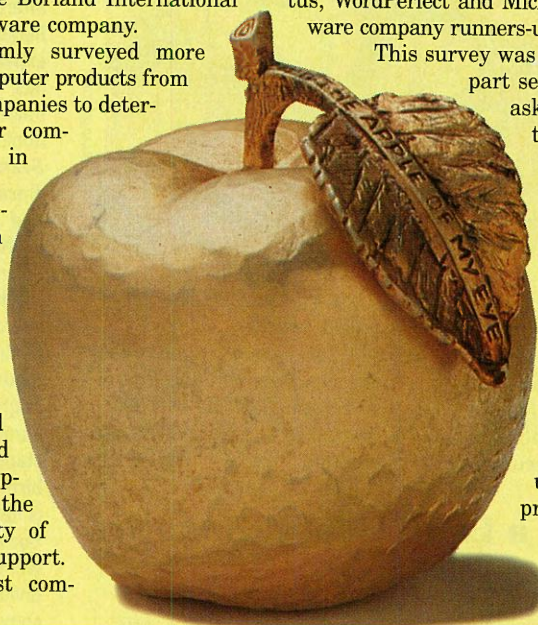
J.D. Power randomly surveyed more than 2,000 users of computer products from nearly 1,100 major companies to determine which computer company ranked highest in customer satisfaction.

"Customer satisfaction" was defined in four areas: performance of the machine in daily tasks; ease of use, including well-written manuals and online support; capability, which included speed, RAM, storage and expandability; and support, which dealt with the quality and availability of service and technical support.

Runners-up as best com-

puter company included Dell, Compaq, AST, Toshiba and Hewlett-Packard. Coming in behind Apple for best printer company were Hewlett-Packard, NEC and Okidata, while Lotus, WordPerfect and Microsoft were best software company runners-up.

This survey was the third of a three-part series. The first study asked the same questions of computer users in small- to medium-sized businesses, where Dell took top honors as best computer company. The second phase queried home office users. Compaq, which doesn't even market its machines to home users, was the surprise winner.



THOS. HOGAN

Formulas by Rote: Just Euclidian Plane Boring

Roy Bolduc, a University of Florida mathematics education professor, has found a high-tech way to spark students' interest in numerical and geometric concepts: use computers and calculators.

Bolduc says students spend about 90 percent of their study time memorizing formulas and only about 10 percent learning how to think and reason. So he

is urging math teachers to forget spoon-feeding rules and theorems and instead let the kids use computers and calculators to graph data and equations, as well as visualize abstract concepts, such as trigonometric curves and functions.

Computers not only make difficult subjects understandable but also help students better relate to what they are



KING ASSOC.

learning, because they comprehend why rules exist and how they are applied.

For more creative math education ideas, consult the Science/Math Forum (GO SCIENCE).

Monitor

Contributors:

Cathryn Conroy, Mike Pietruk, Lindsay Van Gelder

Season to Taste, with Moss

Recipes You Won't Find in Julia Child Dept.: from Section 2, "Scouting," in the Outdoors Forum (GO OUTDOORS), a concoction that, according to a recent exchange between a couple of troop leaders, can actually be eaten:

- ▶ Pick poison ivy leaves—plastic bag over hands.
- ▶ Place leaves in pot, add water, boil five minutes.
- ▶ Pour leaves into a collander and rinse with fresh water.
- ▶ Rinse pot, return leaves to pot and rinse collander.
- ▶ Repeat, twice.
- ▶ Season with salad dressing.

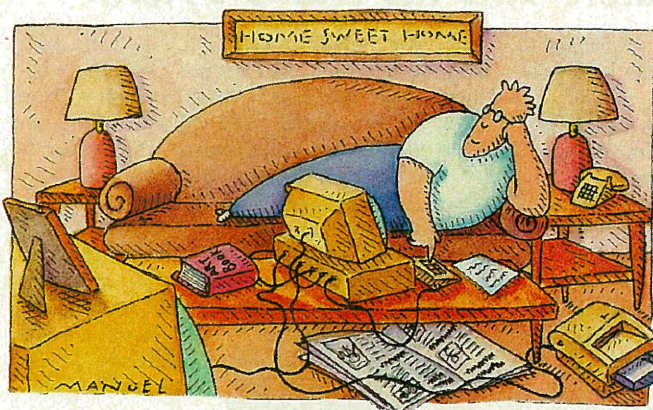
Of course, noted the chef, the leaves "are tougher than a thug and as flavorful as chewing on cheap writing paper ... no one would try it except to prove something!" But another member had an even better survivalist gourmet tip: making baking powder biscuits from used nylon hose.

I Can't Come in Today, I Have a Computer

The miniskirt and telecommuting have something in common," says telecommuting expert Brad Schepp, author of *The Telecommuter's Handbook* (Pharos Books, 1990). "Both have gone in and out of fashion over the past 20 years or so. But there is one big difference between the two: The popularity of miniskirts will always be subject to fashion. In the 1990s, however, we can finally say that telecommuting has arrived for good."

Telecommuters retain a new level of control over their lives and work. In addition to saving money on transportation and dressing for success, they suffer fewer work-related stress problems while increasing their productivity.

The downside of not going



MANUEL KING

into the office, notes Schepp, is the isolation, the constant temptation to not work (consider the refrigerator, that novel or a sunny day) and need for strict self-discipline. It's also possible that the telecommuter

will be knocked off the corporate fast track.

To learn more about telecommuting, consult the Education Forum (GO EDFORUM), Library 10, "Online/Distance Education," file TCOMUT.TXT.

The Quick Brown Fox Sets a Land Speed Record

Wayne Stoler, a 33-year-old mailing list entrepreneur from Baltimore, Md., recently found himself in Wayne Newton's Las Vegas dressing room being asked to type as fast as he could for three minutes.

The scene was the finals of the World Invitational Type-Off, a months-long competition between 10,000 entrants from 40 countries. It culminated at October's Comdex with the six finalists competing in Newton's hotel dressing room. Stoler's winning entry was 140 words per minute with six errors.

"I'm fast, and I'm good under pressure, so I enter contests," Stoler says. But, he admits, "I still can't hit the 0 with my little finger, and my posture isn't so great."

Before he entered this contest, Stoler "psyched himself up" by leaving messages in the Working From Home Forum (GO WORK), asking other



PAUL FISCH

keyboard speed demons for their secrets. He says the secret to his speed is all in the rhythm of his typing. When he gets in a good rhythm, he's got it made.

It might also be in the genes. Stoler's mother once won a Baltimore city contest, typing 99 words a minute on a manual typewriter.

For his efforts in Vegas, he won a 1992 fully loaded Buick Park Avenue, \$10,000 and a cut-crystal trophy.

the adoption searchbook

techniques for tracing people
by Mary Jo Rillera

Quest for Kin

Discovering your roots can be challenging under the best of circumstances, but it is even more difficult and frustrating when you are an adoptee. Recognizing this, the Genealogy Forum (GO ROOTS) has established Section 12, "Adoption Searches," to assist adoptees and birthparents in finding each other. The new section is managed by Mary Jo Rillera, founder of Triadoption Library Inc., a guardian trustee for the International Soundex Reunion Registry in Carson City, Nev. An expert on the subject, Rillera has served on numerous boards and is author of four books, including *The Adoption Searchbook: Techniques for Tracing People* and *The Search and Support Directory*.

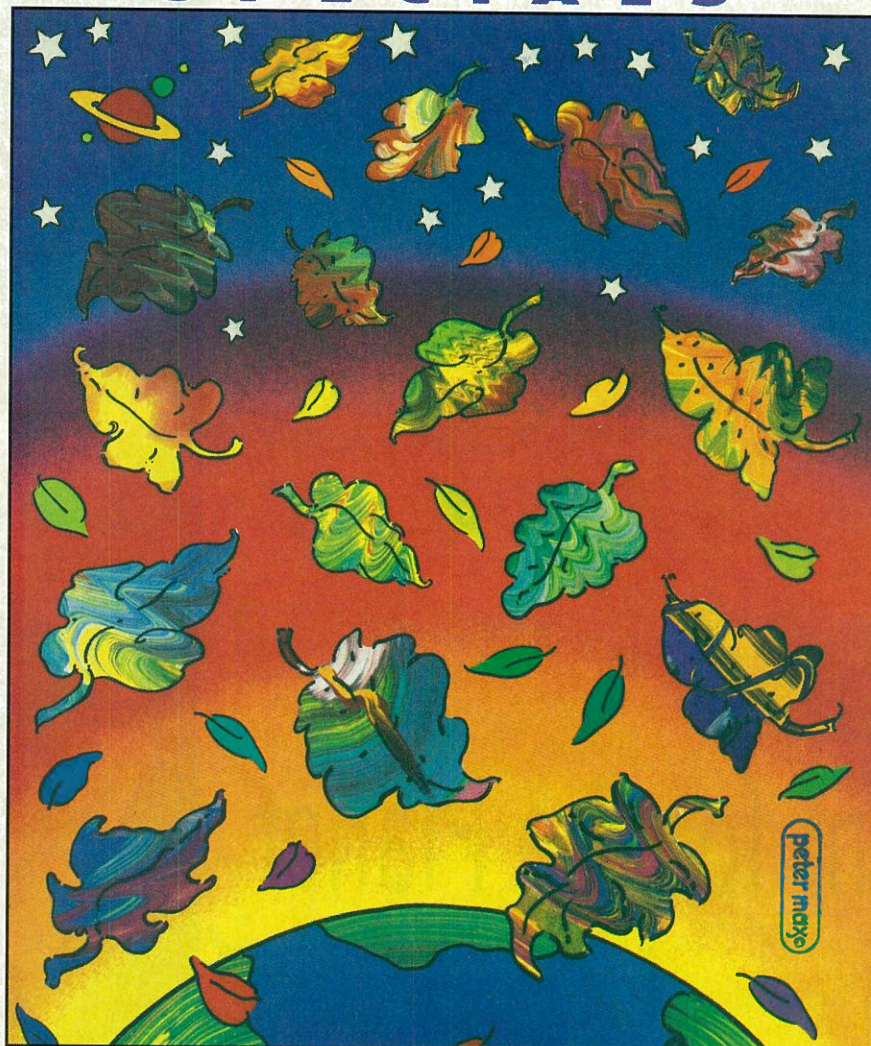
Not surprisingly, much of Rillera's online time is devoted to matching people with resources. She encourages others to ingeniously employ informational tidbits they already might have about their natural parents or offspring. For instance, with a name and date of birth (a Social Security number is helpful but not essential), the Social Security Administration will forward a letter to that individual's last known address conveying your desire to get in touch.

Additionally, in the forum's Library 8, "Societies & Organizations," refer to ADOPT8.TXT, a 33K listing of contact groups, and ADOPT.ISC, a directory of independent search consultants specializing in adoptee searches.

Other adoption topics, including guidance for those seeking to adopt, are regularly discussed in the Issues Forum (GO ISSUES), Section 16, "Adoption Today."

A T B S E X C L U S I V E

SAVE THE EARTH SPECIALS



An unprecedented collaboration. February 23, 24, 25

TBS Original Production

Captain Planet and
The PlaneteersSM
Sunday, February 23
7:00PM/ET

TBS Original Production

"One Child, One Voice"
Sunday, February 23
8:00PM/ET

National Geographic Explorer

"Tides of War"
"Endangered Cultures"
Sunday, February 23
9:00PM/ET

TBS Original Production

Network Earth
Sunday, February 23
11:00PM/ET

The Cousteau Society

"Farming the Oceans"
Monday, February 24
8:00PM/ET

World of Audubon

"The Great Plains"
Tuesday, February 25
8:00PM/ET

In June 1992, leaders from governments around the world will meet for the United Nations Earth Summit in Rio de Janeiro, Brazil to discuss the future of our planet. Turner Broadcasting is producing a series of television programs known as SAVE THE EARTH to help you better understand the issues which will be discussed there.

For more information about the SAVE THE EARTH Campaign and the Earth Summit, and to participate in online SAVE THE EARTH activities, type GO EARTH.

To let President Bush know how you feel about the issues to be discussed at the Earth Summit, send him a SAVE THE EARTH Gram by typing GO EARTHGRAM.

Also, a leaf with your name will be added to the Tree of Life being created for the Earth Summit in Rio de Janeiro.



A Forum for the Planet

FEATURE

CM's Cover Story:
The Greening
of Online

▼
Eco Groups Log
On, p. 12, 15

▼
Environmental
Downloadables,
page 20

► **Online communities have taken on an issue that equals the medium's global nature: the environment.**

For the past 10 years, residents in the seaside Japanese city of Zushi have been vehemently fighting the proposed construction of an 850-unit housing complex for US Navy personnel stationed in nearby Yokosuka, home port of the aircraft carrier Midway. The development threatens to deforest the Ikego Hills, one of the last wooded areas near Tokyo, and disrupt the flow of a river, say citizens groups and Mayor Kiichiro Tomino, who has been re-elected several times based on his opposition to the project.

Several years ago, members of the "housewives' movement" that has grown up around the issue decided a global referendum was needed. A member put out a call on many online networks, including CompuServe, for letters asking the Japanese government not to allow the construction to proceed. Hundreds of people worldwide responded to the message's theme of protecting forests as



a global resource. A stipulation that all of the correspondence be translated before a policy could be created stalled the review process long enough for the next action to be taken. "It's a good example of going to the world's online community, and treating what might have been just a local issue as a global one," says Lisa Carlson, editor of a newsletter for the Washington, D.C.-based Electronic Networking Association (ENA) and a member of the network of people monitoring the still unresolved dispute.

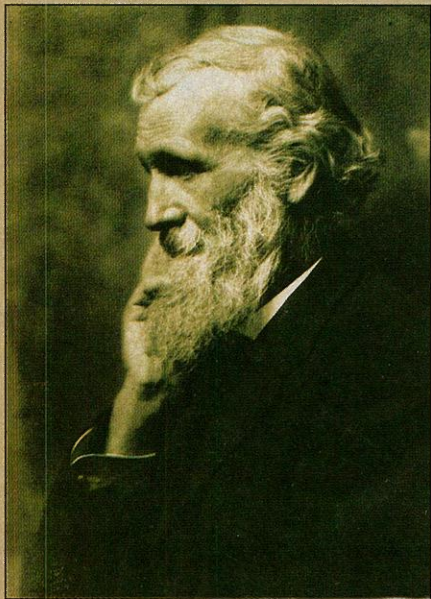


RICHARD LILLASH

The far-flung voices that made up this electronic protest are part of a crescendoing chorus using the online medium to further and explore the cause of environmentalism, to define an issue that is maddeningly complex yet decidedly basic, and to search out solutions in small but well-distributed groups. Many see the potential of the medium to cross time, distance and political boundaries. For them, this quandary of man and nature may finally be what brings the people of the world together.

The online medium has become host for ecologically conscious activities. Dedicated networks such as EcoNet, EarthNet and GreenNet link individuals and organizations around the world. Government bodies and some of the larger environmental groups use online databases and private networks to keep constituents and members informed and communicating. Internet groups unite scientists and others studying the earth's ecology. BBSes encourage grassroots efforts at the local level.

After some resistance, the computer medium has been embraced by those active in the environmental movement, notes Carlson. Its capacity to assist in the movement's goals has, to a degree, transcended the long-held belief that technology is largely responsible for the earth's ills. The change of heart is particularly because of "the obvious connection between information technology and the ability to live out in the woods, to telecommute instead of having a lot of people driving cars to work." Although a massive



Worked toward forest conservation: Muir

When John Muir hiked across the Sierras a century ago and first gazed on Half Dome, he could hardly have guessed that the little club he formed to protect the California wilderness would grow into a global network of conservationists.

The Sierra Club, now 630,000 members strong, is a non-profit, member-supported, public-interest organization that promotes conservation of the environment by influencing public policy decisions, says Brian Erwin, the San Francisco-based club's assistant director of public affairs.

"We're a world in transition," he says. "The standards of 'business as usual' are fast being toppled as more people realize that the ability of the planet to sustain life as we know it is being threatened." They are seeking to make changes that will allow a thriving economy while leaving a clean world to our children. The Sierra Club mobilizes its members to press the officials of their national, state and local governments to enact laws and policies that will prevent abuse of the environment.

And now the Sierra Club is online.

Using Library 7, "Legislation," of the Network Earth Forum (GO EARTH) as a bully pulpit, Erwin and other club officials post regular updates of congressional activity related to the environment.

"We're uploading updates on what is going on in Washington, D.C., specifically about environmental legislation and what the administration is up to," Erwin says.

Networking Earth: Eco-Groups Log On

Sierra Club's Bully Pulpit

Summary files list every major piece of environmental legislation now before Congress. Monthly updates with details on the progress of environmental measures are often available more quickly than the news appears in newspapers or on television. "We hope people will take this information and contact their congressmen and let them know what they believe," Erwin says.

Erwin and Ken Gersten, Sierra Club's field representative for the Appalachian region, also frequently visit Network Earth, the Outdoors Forum (GO OUTDOORS) and other CompuServe forums in hope of stirring up talk and action about the environment. They share the CompuServe User ID number 73467,3262.

"We look to CompuServe as a good outlet for this type of conversation, because it talks to such a wide variety of people, to an international audience," Erwin says.

Many businesses that have been operating the same way for decades are the most resistant to change. "They are spending money on public relations and intense lobbying at the national and state level to maintain the status quo," he says.

Club officials aren't looking for a fight, but they're ready to debate. Says Erwin, "We want to speak not only to the converted but also to people who could challenge us. And we, in turn, can challenge them."

—Robin Garr

online political push is unlikely, there are still worthy uses, says Carlson. "It's not a 'large-scale thousands of people coming to a demonstration' kind of medium. Where this technology can make a difference is in the giving of access to lots of information, and in providing ways for smaller associations of

people with a specific common purpose, such as community groups or task forces, to work together effectively."

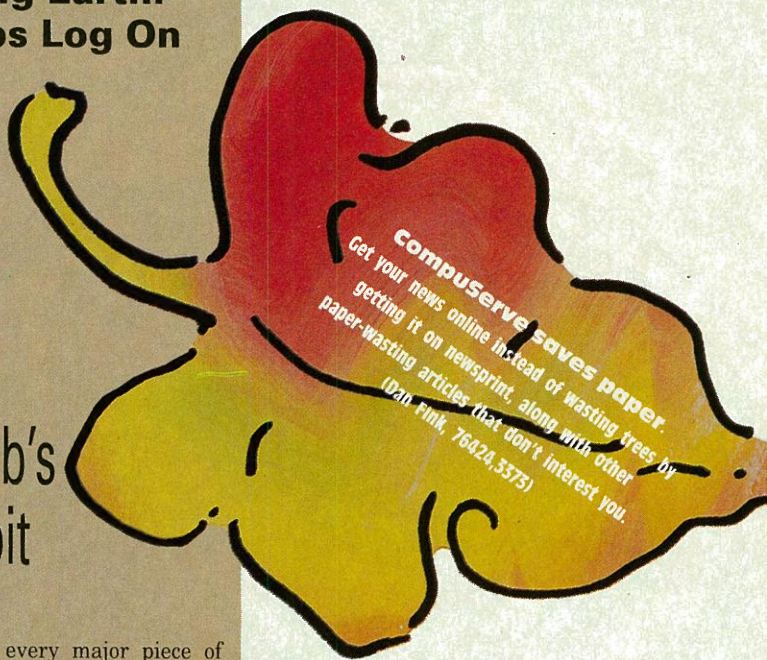
"There's a greater accessibility of information for 'outlying' environmentalists—those who haven't flocked to Washington or San Francisco," says Don White, director of

Earth-
trust, a

Honolulu-based conservation group whose accomplishments include defining the driftnetting issue, policing the international whaling moratorium, and assessing the environmental damage caused by the Persian Gulf War. Earthtrust volunteer professionals work where they live, united by electronic mail, instead of relocating to the eco-subculture cities. "This is making possible some resurgence of grassroots activism at a more expert level, which was being lost due to the centralization and stultifying of the larger ecological groups."

The medium also provides a means for constant collaborative activity and focusing on common goals rather than periodic face-to-face meetings. On CompuServe the tool is wielded most deftly in the Network Earth Forum, which serves as the interactive complement to a weekly half-hour television program on Turner Broadcasting Inc.'s Superstation TBS. The program offers viewers a cover story, feature, newsreel and a parting-shot commentary dealing with ecologically minded subjects. The forum serves as a repository for more detailed information on the aired topics and provides the opportunity for members to interact with the show's production staff.

"My hope when we created this was to more closely link computers and television," says "Network Earth" Associate Producer Staffan Sandberg. "People watching a program like this can become angry or sad at what they see, and feel powerless unless you give them something they can do. Our show tries hard to remedy that." "Network Earth" has a phone-in line (404/827-4040) for offline viewers, "but you can do only so much in that format. With the computer, viewers can talk to each other and our guests, so we aren't leaving them when the show ends," he says.



Another 'Greenhouse' Effect: Growing Your Own Food

Environmentalism begins on the dinner plate. The food you grow in your backyard is the only produce you can personally guarantee to be pesticide-free, hand-picked and ripened on the vine. Home gardening is good for you, and good for the planet.

Getting that message out is the mission of the National Gardening Association, publishers of *National Gardening* magazine. They're coming online to manage the new Gardening Forum (GO GARDEN) with how-tos and tips for gardeners, horticulturists, plant breeders, and anyone who likes to gobble up home-grown fruits and vegetables.

Gardening is the No. 1 hobby in the United States, according to David Els, publisher of *National Gardening*. That means a lot of people with a lot of questions about the best way to fertilize, mulch, prune, weed, harvest and store what Mother Nature has provided.

"One of the best-read portions of our magazine is the 'Help' section," Els says, referring to a page that answers questions on anything from recycling dishwater to composting leaves to growing bigger brussels sprouts. "We have always encouraged dialogue with readers, but it's become so strong that we've had to stop taking phone calls and print only a small sampling of the questions we receive. With electronic publishing we're not penalized by the costs that a printed magazine faces, such as space limitations, printing and postage.

We can provide data to an audience we might otherwise not reach at all: gardeners who don't have quite enough interest to subscribe to a magazine, but who will go online with questions."

The NGA was chartered in 1973 to foster community food cultivation and with it, gardener-to-gardener interaction. While it has since ventured into ornamental plants, growing good food is still the group's main focus.

National Gardening allows readers to exchange composting tips, trade vegetable recipes, and search for heirloom seeds. The Gardening Forum likewise has flourishing sections for seed swapping, ecological pest and weed control, herb growing and landscaping.

"We'd like to add a section that answers questions about gardening products," says Editor-in-Chief Warren Schultz, "and a section for professionals, such as extension agents, seed breeders, horticulturists and others in the trade. We also hope to post a

regular schedule of flower shows, seminars, displays and other gardening events."

One new idea is to develop an ongoing gardening calendar. "People can come online and report what they're doing in their gardens. That will provide a running commentary on gardening chores, and by the end of the year members will have complete information on working in a garden. We plan to edit it, compile it by region and upload it to the library," says Schultz.

User interaction isn't limited to libraries and discussion sections. Schultz plans to hold four conferences per year, bring in guest experts, and conduct member surveys on seeds, tools and more. He also welcomes additions to the gardening software files, including reviews and recommendations from others who've laid out gardens, tracked the weather, or monitored plant production with their Macs or IBM PCs.

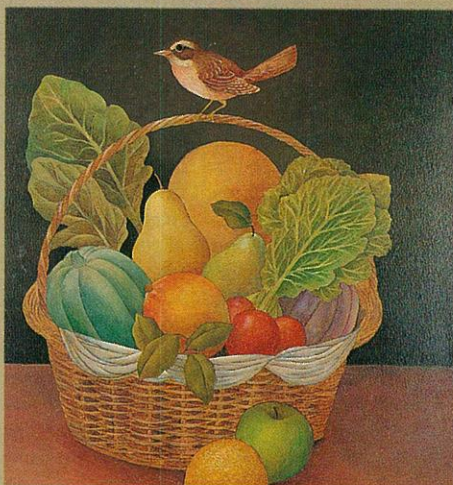
Schultz welcomes members from around the world. "We recently had a visit from several Soviet gardeners and found that they had a lot of good information."

The NGA serves as a key source of data collection and dissemination for the \$20 billion business that is gardening in the United States. With the Gallup pollsters, it produces the annual National Gardening Survey, a database targeted to industry pros. NGA plans to upload the survey, hundreds of reprints from *National Gardening*, and its yearly directory of seed companies to the forum libraries.

Likely to gladden the hearts of regulars, browsers and visiting chefs from the Cooks Online Forum is the fact that *National Gardening* is uploading its recipes, too: healthy, delicious, fat-free, no-preservatives-added food the likes of Pennsylvania Dutch stuffed beets, garden pizza, and Chinese broccoli with pasta, avocado and radish. How can you resist? After all, Schultz says, "One of the main ideas in growing vegetables is to eat them."

For a *National Gardening* magazine subscription, call 800/727-9097.

Maura J. Mackowski is a free-lance science/technology writer in St. Louis. She is sitting by the mailbox, waiting for the first seed catalog of spring. Her CompuServe User ID number is 76004,2243.



C.S. O'LEARY

FEATURE

The forum has gone beyond being a mere extension of the program's segments to becoming a real resource for people seeking information. Groups participating include representatives from government organizations such as the EPA; environmental groups such as the Sierra Club and Greenpeace (see stories on pages 12 and 15); and other interest groups such as the League of Conservation Voters, which tracks the voting records of US legislators on environmental issues. These groups are uploading press releases, legislation updates and action alerts, and also are jumping into forum discussions to contribute expert perspectives.

"I try to bring on organizations that have

a specialty," says Sandberg. "There are many general environmental groups, and then there are essentially one-issue groups. They can add a lot to the mix." While Greenpeace and the Sierra Club could be considered among the more comprehensive groups, Network Earth is only tapping specific information from their store, Sandberg adds, namely proficiency in legislative matters. "One area we're also working on is online experts—having regular contributors who can answer very specific questions."

Charles Brister is one such expert. With years of experience in the oil production, solar power and electrical power generation industries, Brister is

Answer business mail online.
Many business matters can be accomplished via CompuServe Mail, without a waste of paper and the energy required for the postal service to deliver it.
(Steve Olson, 76650,13)

a de facto section leader of the forum's Energy section, and fields questions on characteristics and installation of alternative energy systems. "Sometimes the discussions become more focused on the political aspects of why some renewable energy systems are more successful than others. I try to keep my discussions focused on the technical validity of systems and keep the politics separate."

This is a difficult process, reflected in the fact that discussion in the section, originally titled Alternative Energy, took a broad turn in the midst of the Gulf War and required a change in focus to the larger picture. "We

help in coupling a wind generator to the hot water storage system as part of the heating system. The house, which Heim had been planning for four years, incorporates passive and active solar heating, a urethane foam roof and energy-efficient appliances. "I've gone to the forum with highly technical questions and had answers in less than a day," says Heim, who tries to balance the scales by contributing ideas to others interested in similar projects.

A subject as complex as environmentalism—with so many issues, proposed solutions and values to contend with—creates many black-and-white positions with a great deal of gray space in between. "People wrongly see environmentalists as a group," says Sandberg. "There's a wide spectrum of concerns and a wide range of reactions. Some like the direct approach of ramming a ship or spiking a tree, while others prefer lobbying Congress and educating the public."

The forum's Other Stuff section is where those gray areas get a healthy workout from the political left, middle and right. Philosophical questions are debated here, such as whether animals have rights, if there is something inherently immoral in a tree farm as opposed to a forest, and whether it is man's role to reshape the earth. "There are some members who think environmentalists are trying to destroy America by stopping industry, that in truth there is no global warming or lack of biodiversity. There are some who are really scared of the current state of things, in some cases perhaps more than they should be," says Sandberg, whose original concern that forum members would all end up agreeing has been supplanted by concern that the deliberative back-and-forth may be slightly counterproductive. "Unless we resolve whether there's a problem or not, we're not going to get going on the solution. But both sides have a place here," he says.

The hope of the Network Earth project is to encourage people to realize that there are eco-consumerism changes, not compromises, that can be made to lessen an individual's impact on the planet, and to provide answers to people who ask "how?" "By being able to ask what they can do in this area, be it recycling, disposing properly of motor oil, simple things like that or even more complex issues, they're able to receive answers, and in that way, directly alter their lifestyle to be less destructive to the earth," says Sandberg.

FEATURE

Network Earth (both TV program and forum) will be actively involved in covering events at the June 1992

"Earth Summit" in Rio de Janeiro. The United Nations Conference on Environment and Development (UNCED) will bring together nearly 100,000 environmentalists, religious leaders, heads of state and other concerned bodies to hammer out historic declarations and international agreements controlling climate change, deforestation and biodiversity, with provisions for monetary and technological aid to developing countries so they can grow without destroying important ecosystems. "Network Earth" and other programs in TBS' line of eco-programming will be airing Earth Summit specials during February (see the "Save the Earth" schedule included on p.9), and "Network Earth" will recap events of the conference during a wrap-up special on June 21. The forum will include news updates and uploads from the US Citizens Action Network on UNCED, an organization culling input from community groups.

US resistance to pressure from Europe and Japan on the proposed setting of timetables for curbing carbon dioxide emissions and other issues is "embarrassing" and could ultimately reduce the effectiveness of the Rio conference's agreements, says Thom Beers, director of development for TBS Productions. The Bush administration's reluctance to support these treaties is the impetus for the Peter Max-designed "leaf mailgrams" and CompuServe Mail's companion EARTHgram dispatches (GO EARTHGRAM) bound for the White House and Rio. In the Brazilian metropolis they will be assembled into giant "Trees of Life" to show worldwide support. "We are trying to take it to the people, to let them know what's happening and what the issues are. We're looking for a commitment from the President and a personal commitment as well," says Beers.

Other online areas also reflect varying shades of environmental involvement—from nature consumers to

Worried about the air we breathe?
Before your next visit to the mechanic, check out the file CLEANA.TXT (or the compressed version, CLEANA.ARC) in the Automobile Forum's (GO AUTO) Library 13, "Technical Trends," for a complete summary of the US Environmental Protection Agency's proposed regulations on removing ozone-depleting chemicals from auto air-conditioners. And while you're in Auto Forum, ask the experts there for advice on other ways to keep your car running clean.

have had some heated discussions, but I feel that it is a learning process for all," says Brister, who believes the exchanges in the section are a microcosm of what needs to happen on a global scale. "We have now reached a point where our modern world is driven by a dynamic yet fragile energy system, which is dealing with an increasing population and a decline of resources. There is a desire by quite a few people that with the end of the war in the Middle East, energy be a non-issue. Nothing could be further from the truth. We will have continuing shortages, recessions and environmental problems until we face the issue squarely and deal with it."

Dan Heim received useful advice in the section. A builder of an earth-sheltered home near Phoenix, Ariz., Heim garnered technical

Save on fuel and pollution
by leaving the car home while shopping in
The Electronic Mall and even by
telecommuting between home and office, using
CompuServe's mail box and other electronic mail
capabilities to deal with the boss.
Save a trip to the library:
Look it up in one of the online reference sources.
(Jane Ausickler, 70751.2674)

Networking Earth: Eco-Groups Log On

Greenpeace Seeks a Dialogue

Mention Greenpeace, and most people immediately think of noisy confrontations and attention-grabbing media events, such as Zodiac boats zipping dangerously close to the bows of Japanese or Russian whaling ships, acknowledges Bob Lyons, manager of the Vancouver-based environmental-action group's International Information System.

But Lyons says Greenpeace is determinedly non-violent. Although its 20-year history includes more than a few stories about violent attacks on Greenpeace demonstrators, its members are committed to peaceful resistance when all other efforts to block assaults on the environment fail.

"There has never been a case of violence from Greenpeace," Lyons says. "We do have a confrontational side, but that only comes out after we've tried to get through normal channels. We attend conferences with the United Nations and the European Economic Community. We testify to the House and the Senate. We put together papers and reports. If all that fails and we still see a species going out of existence, we feel it's our job to put a public spotlight on it."

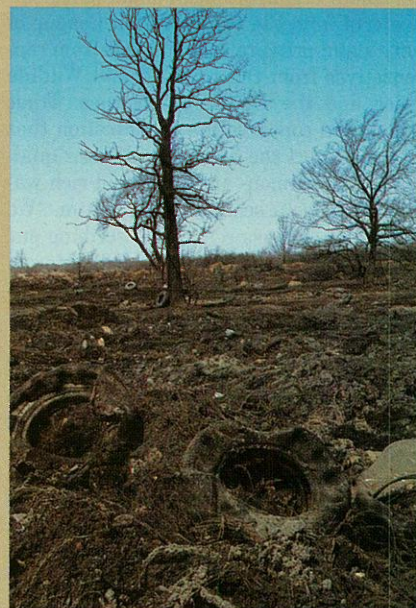
Since September, the environmental group has been uploading daily reports from activists worldwide to Library 16, "Greenpeace," of the Network Earth Forum (GO EARTH).

The five dozen news releases, statements and reports uploaded within Greenpeace's first two months online cover a broad range of topics. Some files provide details about the organization. Others offer straightforward news accounts about environmental matters, including a list of nuclear weapons remaining in Europe, and reports on driftnet fishing in the North Atlantic.

Files also include unabashedly political opinion, such as an editorial accusing President Bush of "playing God" with the fate of endangered species. And more than a few found Greenpeace volunteers in confrontational situations, from Nebraska, where arsonists burned a Greenpeace bus, to Sicily, where Greenpeace activists in an

ultralight aircraft "buzzed" a meeting of NATO officials.

Lyons calls the online presence a "Greenpeace newswire." "This keeps people up-to-date, and they get the full text of what we're doing. Sometimes newspapers give only a paragraph, without the reasons



TERRY BUSH/GREENPEACE

Working on the scrap tire issue: Ontario dump

behind an action. This gives the reasons, a more in-depth look and another point of view," he says. In addition to news releases, Greenpeace posts fact sheets and executive summaries of its independent reports on environmental issues.

Lyons will respond to messages sent to User ID number 76702,1731. "We want to see a dialogue," he says. "That's why we're on CompuServe. We appreciate that people in business and government have opinions, too. It's going to take the kind of dialogue that CompuServe can provide to make things happen."

—Robin Garr

Conference online.
Through the conferencing capability in CompuServe's forums, you can have 20 friends or business associates in your home without anyone having to travel.
(Steve Olson, 76650,15)

chemical handlers to backyard gardeners. Opposing views on environmental topics often face off in the Outdoors Forum, which puts consumptive users of natural resources, such as hunters and fishermen, in close quarters with nonconsumptive users, such as hikers, bicyclists and campers, with occasionally heated results. "One of the areas that comes into disagreement a lot is people accusing hunters of killing endangered species or wiping them out," says Joe Reynolds, sysop and regional editor of *Field & Stream*. "In fact, the problem with wildlife today is not hunting but loss of habitat to development. Hunters and fishermen are concerned with that."

The rift between the two groups is one that does not necessarily have to exist, Reynolds says, noting that several decades ago, before the modern movement, consumptive users were the only people concerned with conservation. "This conflict has arisen between modern environmentalists and hunters and fishermen, who see themselves as the original conservationists. I don't know how it's going to be resolved, but we see it quite often in the forum."

Discussions spin off to other natural resource topics, such as the desirability of drilling for oil in the Arctic National Wildlife refuge, game management, nuclear energy, the value of using recycled paper, and particularly the cutting of old-growth forests. "We get into some vigorous debates," says

Sysop Les Line, former editor of *Audubon* magazine. "We've had discussions between pro-logging and anti-logging people, and we've had strong exchanges with the Earth-First people who believe in eco-sabotage. We've had the chance to air views and perhaps change some opinions."

A typical clash might involve a discussion of doves in the forum's Birding section in which a hunter comments that the fowl is good for hunting: difficult to shoot and quite palatable. "Of course, some of the birders become incensed," says Reynolds. "If a hunter points out that something on the order of 80 percent of the dove population dies every year regardless of hunting, they don't want to hear that."

Carolyn Hoffman, who leads the Birding section, acknowledges the occasional friction but says there are two ways of reducing it: "One is to focus on the arguing parties' similarities; birdwatchers and hunters are both interested in preserving the open spaces so they can continue their activities. The other way is to focus on specifics and try to find the facts of particular cases. "Sometimes just clearing out the rhetoric is enough to begin a

good discussion."

The Birding section hides an untapped potential for the online medium, Hoffman adds, in that birders logging on from geographically dispersed areas allow the tracking of birds' migrations, which could provide an early warning that a species isn't doing well. "Birds are a good indicator of how we're taking care of the planet. They're rather high up on the food chain, so when things are affecting them, it's only one step away, in many cases, from affecting humans. DDT is a case in point—many bird populations are still recovering from that."

The Outdoors Forum also benefits from the presence of various environmental and government organizations, including legislative alerts from the Isaak Walton League of America and press release uploads from representatives from the US Fish and Wildlife Service and the US Forest Service. Trout Unlimited, a conservation organization that works to protect the habitat and water quality of trout-, salmon- and steelhead-rich waters, maintains a section in the forum. "We put up a lot of press releases describing our activities and things we think will interest the environmental community or the Outdoor Writers Association of America," says Neal Emerald, Trout Unlimited's director.

Wetlands delineation is an issue of vital concern to the group; the controversial expansions of marshy lands provide important biological functions that protect the integrity of river waters. Pending alterations to the federal criteria by which wetlands are classified would destroy much of the protection provided by the Clean Water Act, and are based on

purely political concerns, says Emerald. "The administration has pressure from the oil and gas industries and real estate interests to open up more wetlands for destruction or development. We've already lost half the wetlands this country originally had, and now they want to open up 60 percent to 75 percent of what's remaining."

As a means of promoting discussion of environmental and other issues within the forum, Reynolds created a companion news clipping service, Outdoors News Clips. Reynolds posts news stories daily from his own Executive News Service file, saving members the bother of setting up their own files. "This medium does the same thing for environmentalism that it does for other issues: It provides a unique opportunity for a national discussion involving Joe and Jane Citizen," says Reynolds. "People used to get their news over the radio, newspapers and television. But there was no interaction. Now there is. As more people have access to this, it has the potential to have a tremendous impact on the way people think and possibly on the politics of the environment."

People who deal daily with the details of industrial environmental compliance, hazardous waste management and cleanup and chemical safety use the Safetynet Forum to network. "Our exchanges tend to be more along the lines of questions, answers and anecdotes from one professional to another, rather than generalized opinions, comments on general policy or what we might consider activism," says Forum Manager Charles Baldeck, a consultant in industrial hygiene. Networking within the industry of occupational and community health is crucial, he says, "because the area is so big and touches on so many things that no one can be a complete expert."

Indoor environments are of primary concern in the forum; questions of how paint samples can be analyzed for lead or what to do about perceived hazards in the workplace are often brought up. Other exchanges among public safety officials focus on setting up plans for response to emergency chemical spills, and discussing ways fire departments have coped with requirements to track all hazardous wastes within their jurisdiction.

The forum's Environmental section is underused, says Baldeck, because discussions in other message sections cover the same ground, con-

FEATURE

firming the notion that it's hard to distinguish the borders between safety of individuals, safety of the public at large and environmental preservation. "When you have the problem of workers being exposed to chemicals, then they bring this home, and it becomes a problem in the family and maybe within the community."

One of the underreported environmental crises is the rapid rate of extinction of plant varieties and the genetic materials they possess. This loss of diversity, helped along by the tendency toward uniformity in food crops and an economy that drives small farmers and seed companies out of business, leaves the world with fewer strains of seeds and increases the risk that entire varieties can be wiped out by blight and disease. The Gardening Forum's Seed Exchange section is part of a trend to rediscover and cultivate older generations of seeds.

"Our exchange, in its small way, helps in this massive effort to keep seed diversity high by continuing to use the old varieties in everyday growing activities," says Howard Maculsey, a California landscaper and gardener who oversees the section. He has few illusions about the section's overall impact, but holds a certain satisfaction in sharing these priceless heirlooms. "Long-term success for the environment, whether it's reducing pesticide use or perpetuating a diversified seed heredity, will depend on regular folks doing the right thing everyday," he says.

Environmental awareness can also pop up in some unexpected locales online. Astronomy Forum members often bring up the subject of light pollution, focusing on such issues as how to make municipal governments and others aware of the risk of encroachment upon pre-established observatories, and which lighting technologies minimize the problem while providing adequate outdoor lighting. Questions in the Motor Sports Forum occasionally turn to the

Learn about the possible hazard of lead leaching into beverages
from lead-crystal decanters, and read how to responsibly dispose of lead-free wine-bottle "capsules" in the files LEAD.ZIP and FOIL.TXT in Library O, "General/Questions," of the Bacchus Wine Forum (GO WINEFO). Homebrewers who visit the beer and homebrewing sections (GO BEER) should check in with the forum's drought-stricken California brewers for tips on saving and reusing water in the brewing process.
(David Smith, 72320,275)

Use your "green" thumb.
Check in the 'Gardening Forum (GO GARDEN) before buying or applying any chemical insecticide, fungicide or herbicide to the lawn or garden. Expert forum members can recommend an organic control for nearly any problem or at least help minimize the use of chemicals.
(David Els, 76741,345)

Green References: Research and Read More About It

In your individual green quest, seek the help of environmental experts worldwide through CompuServe's reference resources in IQuest and Magazine Database Plus. You can use the information to back up your reasoning in a letter to your congressional representative, to add sparks to your battle with city hall or just beef up your viewpoint in a forum discussion.

IQuest Resources (GO IQEST):

ACIDOC offers references to Canadian, European and US literature that covers all aspects of acid rain, including sources and control of acid precipitation, air and atmospheric processes, environmental effects, and political and socioeconomic factors.

Air/Water Pollution Report monitors air and water pollution developments with an emphasis on the Clean Air and Clean Water Acts and other environmental laws. Full text.

Business and the Environment is the full text of a newsletter that covers "green" companies. Features include global news, market trends and new ventures.

Energyline offers selected articles and abstracts from reports, speeches and other sources addressing technical and political/economic issues related to energy.

Envioline contains abstracts of major environmental articles from periodicals and other sources and covers the whole spectrum of environmental issues.

Global Environmental Change Report presents worldwide scientific findings, legislation, technological innovations and industry actions, including global warming, acid rain, ozone depletion and deforestation. Full text.

Green Marketing Report covers trends in environmentally aware products and packaging. Full text.

Hazardline provides a directory of hazardous substances, including the name, formula, danger to humans, and responses to overexposure and accidents.

Indoor Air Quality Update focuses on practical solutions to indoor air problems. Full text.

Multinational Environment Outlook addresses environmental and resource management issues worldwide, including trends and issues related to energy sources, conservation, pollution, toxic substances and land use. Full text.

Nuclear Waste News contains the full text of the newsletter covering worldwide nuclear waste issues, such as management, regulation, transportation and disposal.

Oil Spill Intelligence Report offers worldwide information on oil spill cleanups, control and prevention. Full text.

Water Resources Abstracts contains materials collected by 50 water research centers in the United States.

Magazine Database Plus Resources (GO MAGDB):

"Fighting Mother Nature," *Technology Review*, Oct. 1991, p. 73; article #11304066.

"A Power for Good, A Power for Ill: Controlling the Environmental Effects Caused by Energy Usage," *The Economist*, Aug. 31, 1991, p. E3, article #11190916.

"What Can You Do About the Environment?" *Cosmopolitan*, July 1991, p. 102; article #10885544.

"Limiting Consumption: Toward a Sustainable Culture," *The Futurist*, July-Aug. 1991, p. 11; article #10958049.

"The Golden Rule: Your Tax Dollars and the Environment" (environmental analysis of the proposed fiscal year 1992 budget), *Popular Science*, July 1991, p. 9; article #10886883.

"Bioremediation: Healing the Environment Naturally," *Research and Development*, July 1991, p. 34; article #11012275.

"Giving the Staff the Stuff of Life," (office environment), *Management Today*, June 1991, p. 73; article #10882671.

"Children and the Environment," *The UN Chronicle*, June 1991, p. 59; article #10977859.

"The Greening of High-Tech," *The Futurist*, May-June 1991, p. 28; article #10680534.

best method of disconnecting an automobile's pollution control devices, to which sysops reply that such tampering is not only illegal but also harmful to the atmosphere. Crafts Forum exchanges have produced talk of spinning acrylic fibers instead of such natural ones as cotton, wool and silk, and even dyeing materials using a popular flavored drink mix instead of more toxic stains.

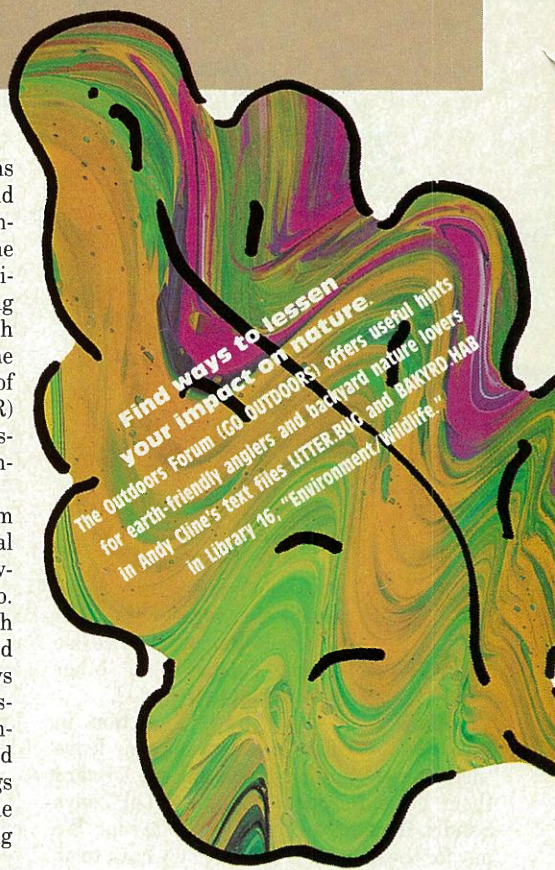
The realm of freely distributed "shareware" has in part taken on the cause. Dave Haynie, a programmer at Commodore, authored the highly used disk recovery utility DiscSalv for the Amiga (file DSAL42.LZH in Library 9, "Disk Utilities," of the Amiga Users Forum, GO AMIGAUSER). Aware that the financial returns from shareware registration can sometimes be marginal at best, and not one to include "screens that yell at you and make you feel guilty for not paying," Haynie asked instead that users who liked DiscSalv send a donation to Greenpeace.

"It seemed to go together: I save your disk for you, and you help save the environment," says Haynie. "It was an interesting experiment. I hope others will get the same idea and it'll become more prevalent."

Environmentally educational programs are becoming more available, and Roger and Kathy Cox of Pitkin, Colo., have found themselves a niche in the genre. Their Save the Planet release explains the political and scientific issues surrounding global warming and ozone depletion, and the Macintosh HyperCard version is made available online (STP211.SEA in Library 3, "Education," of the Mac Hypertext Forum, GO MACHYPER) by the GAMER Project, an international users group promoting the Mac's entertainment and teaching attributes.

The Coxes got the idea for the program after attending a Colorado Environmental Coalition workshop two years ago and viewing a land developer's slickly produced video. "I kept thinking if they're using high-tech tools, then maybe environmentalists need the same thing to promote their cause," says Roger. They felt information about such issues as deforestation and population increases wasn't getting needed attention, and that the American public's fear of things scientific was leaving the problems "to the men and women in the white coats, big business and the government."

Save the Planet, which includes tutorials, resources for writing elected officials and a *Global Roulette* game that simulates



society's ability to deal with degrees of atmospheric warming, now has registered users from schools and corporations in 10 countries awaiting its annual updates. "The topic lends itself well to publishing in a software format," says Roger. "The information is constantly changing. For example, data on climate changes often, and so a lot of textbooks are reluctant to get involved with something that evolves as dynamically as this does."

The online medium also has proved to be a connection between technology-producing businesses and their increasingly eco-minded customers. Canon, the maker of personal copiers, printers and fax machines, uses its own forum (GO CAN-10) to promote its Clean Earth Campaign. Begun last May, the organized push allows

(those from products with Canon's LaserBeam engine are). Canon also donates \$1 per returned cartridge to the National Wildlife Federation and the Nature Conservancy. The West Coast pilot program in 1990 yielded 90,000 cartridges.

Staying in touch with the mainstream of journalism has been the reason Dan Hamilton continues his duties as a sysop on the Journalism Forum. Hamilton left a job at a weekly newspaper to become a publications specialist for the Cape Cod Commission, the leading land-use regulatory agency on the environmentally fragile Massachusetts peninsula. "A lot of what I do here involves the same skills, but applied in a different way," he says.

The commission is a regional planning agency that has the power to modify projects and even delay construction of commercial and residential development until it is in line with environmental and other guidelines. Hamilton's newsletter circulates to public officials and citizens in all 15 towns on the Cape, where the water supply is clean but vulnerable to pollutants leaching through the sandy soil. "Cape Codders are more aware than people in other places," he adds, "because if we foul our own nest, that's it."

Hamilton has in turn helped other journalists on the forum with their eco-reporting, supplying contacts and expertise he's gleaned in his work. A recent round of messaging on wetlands replication, the controversial process by which artificial wetlands are created to compensate for real wetlands' destruction, is a case in point. "I talked to some cutting-edge researchers who said it doesn't work. A woman on the West Coast was looking to do some reporting on the issue, and I put her in touch with a source at Tufts University who had done some truly ground-breaking work," he says.

Pets Forum Manager Mark Miller, a zoology researcher and author, advises members who frequent the Reptile/Exotic Animal section in the care and breeding of harmless snakes, lizards, turtles and frogs, creatures now often imperiled in the wild. "Reptiles, proportionate to their numbers, are the most endangered invertebrates on the planet," says Miller. "They're the first to suffer from habitat loss. They're often collected by indigenous peoples for their meat and skin, or for export in the overcommercialized pet trade. If you think about the tortoises, the monitor lizards, all but the most common snakes are dwindling at an alarming rate."

Miller, who also operates the international Herpetology Online Network, advocates captive reproduction as a means of reducing pressure on wild populations. Forum members use the section to locate other reptile owners for breeding loans, and obtain advice on egg care, which often can't be found

quickly, even from pet shops. "People who have these animals in captivity have a responsibility," says Miller. Many toads and lizards kept as pets in the early part of the century are now extinct because people didn't keep them propagating.

The hot topic in the world of aquaria is the popular miniature saltwater reefs hobbyists are creating in their tanks, in effect "living pieces of the ocean." These don't display fish as people are accustomed to seeing. Instead tiny crabs, shrimp, clams, sponges and other invertebrates colonize a multicolored slab of "live rock," often dead coral, which serves as a natural filter. Members of the Aquaria/Fish Forum (also known as Fishnet) have debated the process by which the rock and its organisms are taken from Florida and Gulf waters, and the appropriateness of pending state and federal legislation initiated by the environmental organization Project Reefkeeper, which would ban the wild harvest.

"There's a whole range of opinions on it," says Mike Plaia, the forum's legislative liaison, who charts aquaria-related laws around the United States. "Some people agree we shouldn't be messing with the reefs at all and support the ban," says Plaia. That argument is supported by scientists who worry about the carting off of the craggy homes for hundreds of animals, many at their vulnerable larval stage of life.

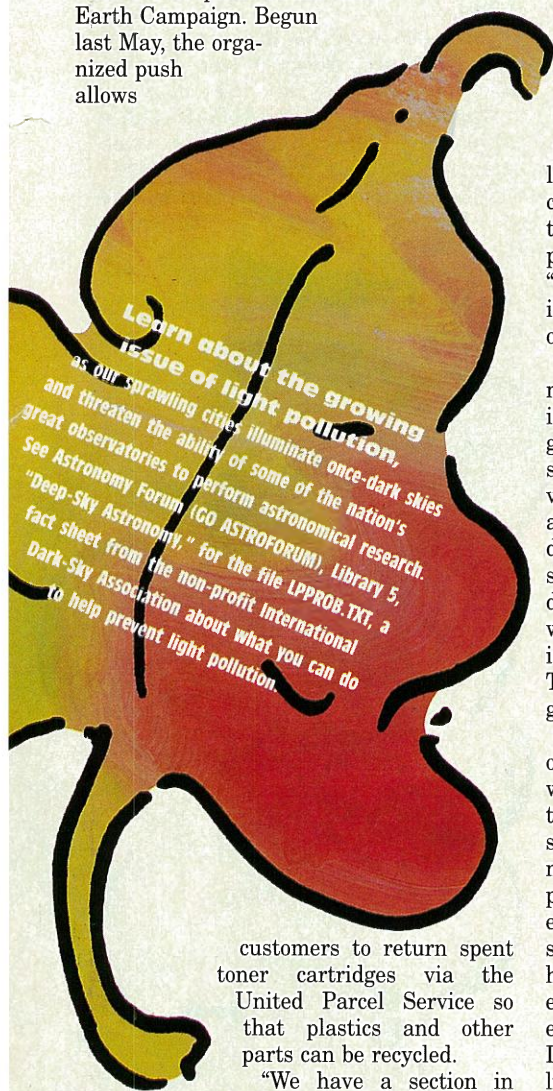
"Some think the rock, especially coral, is a renewable resource and that some allowable but not totally unrestricted harvest is permissible. Still others hold the opinion that there's a lot of rock out there between Florida and the Caribbean, and the little bit taken for the aquarium trade doesn't even put a dent in it." In the event of a harvest ban, live rock collectors would have to try unproven "aquaculture," in which rock would be dumped onto government-licensed tracts of sea floor and harvested years later, an option still others on the forum favor.

If the National Marine Fisheries Service, the federal regulatory body responsible for the fishing trade, attempts to enact an emergency-rule ban, Plaia hopes to use the required public comment period beforehand to get a consensus among forum members and create a position paper for submittal. The forum has done it before, in cases where state agencies tried to regulate the fish trade or ban the importation of certain freshwater species. If reaching a consensus is difficult, says Plaia, "we'll adopt the philosophy of simply educating members as to what's happening. If the law passes we'll let them know what they can or can't do."

Recreational users of aquatic environments, people who regard water as a surface across which they paddle, motor or ski, never

customers to return spent toner cartridges via the United Parcel Service so that plastics and other parts can be recycled.

"We have a section in which customers can leave their names and addresses, and we forward them an authorized shipping label," says Sandra Romero, a Canon Forum sysop. "We pay for the shipping costs; all they have to do is drop it off at a UPS station." Forum visitors typically ask for more literature on the program and if other cartridges are accepted



get to see the other side, notes John Hicks-Courant. A diver and professional writer, he used that premise and interest generated on the Scuba Forum to found the Divers Environmental Survey, a non-profit corporation with the simple mission of having divers tell other people what they see while submerged.

"For about 40 years, scuba divers have been seeing things underwater that are wrong," Hicks-Courant says. "The water is not a completely separate environment. It is an exact reflection of the terrestrial environment and all the damage that's gone on there." While pleased with the rounds of monitoring the Clean Water Act has required, he finds mere testing of the ether that aquatic life lives in to be analogous to testing the air in a devastated rainforest. "It's very simple to go in and see that the trees and wildlife are gone," he says.

Divers in the program don't initiate inspections, but merely provide information to people already concerned about a body of water: citizens, government agencies and, when necessary, the press. While observation is still their primary function, cleanup efforts have been initiated in a few aquatic areas of New England, including the Ghost Gear Project effort to remove lost-but-still-fishing metal lobster traps from Massachusetts waters. "There's an endless cycle: a lobster gets in one and dies, and serves as bait for

Stovall spreads. Stovall created PhotoGreen, an information clearinghouse that works with everyone from film manufacturers to amateur snapshooters to curb pollution and waste. "We serve as a conduit of people's feelings, what photographers want the manufacturers to do more of," says Stovall.

Stovall is experimenting with CompuServe's Photography Forum as a line of communication to gauge concerns of photographers. He also is using information from discussion threads in setting an agenda and picking up tips that can be passed on to other members of an industry that has become more computer-intensive. Many photojournalists use electronic mail to stay in touch with their employers, and imaging systems that can record, upload and alter photos electronically are used increasingly.

Makers of film products, aware of the large percentage of customers concerned about their environmental performance, have taken steps to reduce effluent and air emissions, recycle chemicals used in the manufacturing process and cut back on wasteful packaging. Stovall's hope is to take what the manufacturers have learned and apply that to the other end of the spectrum:

small processing labs and private darkrooms that have standards to adhere to yet are largely unregulated.

"We're looking at the whole picture. As a photographer, I create the industry. Without me, that industry doesn't work, so I'm responsible for what it does in my own way," says Stovall.

"Our feeling is that if it works in our industry, it'll work in any industry, if you get everyone involved," he says. "We got feedback from people saying, 'I'm just a hobbyist; I'm not in any industry.' And we said, 'Yes, you are.' We're all part of hundreds of industries in our daily lives, and we have to start thinking that way, because as end users and consumers, we can do a lot."

ENA's Carlson believes there are any number of ways micropopulists can use networks to get involved. "You can go online and access these databases or newswires or other sources of information about what's going on in the world in general, and use that for ideas or evidence in influencing legislation at the local level," she says. You can get your schools involved in online activities geared toward teachers and children, especially if they don't have the curriculum materials or expertise to do it on their own.

"There are several good online projects with education as a theme," Carlson says. The World Class project conducted each year by the Breadloaf School of English brings together 70 classes from North and South America, Asia and the Soviet Union to report on environmental projects performed in their

Express Your Views

Whatever your thoughts are on the problems of and solutions to matters earthy and environmental, there's a number of CompuServe forum areas available for perusing and participation.

Network Earth Forum (GO EARTH)

All sections, including
Section 4, "Eco-Consumerism;"
Section 6, "Teacher's Workshop;"
Section 7, "Legislation;"
Section 12, "Waste/Recycling;"
Section 13, "Energy;"
Section 16, "Greenpeace."

Outdoors Forum (GO OUTDOORS)

Section 4, "Trout Unlimited;"
Section 5, "Fishing;"
Section 6, "Hunting;"
Section 8, "Audubon/Birding;"
Section 16, "Environment/Wildlife."

Gardening Forum (GO GARDEN)

All sections of this new forum are devoted to topics agricultural and horticultural, including the Seed Exchange.

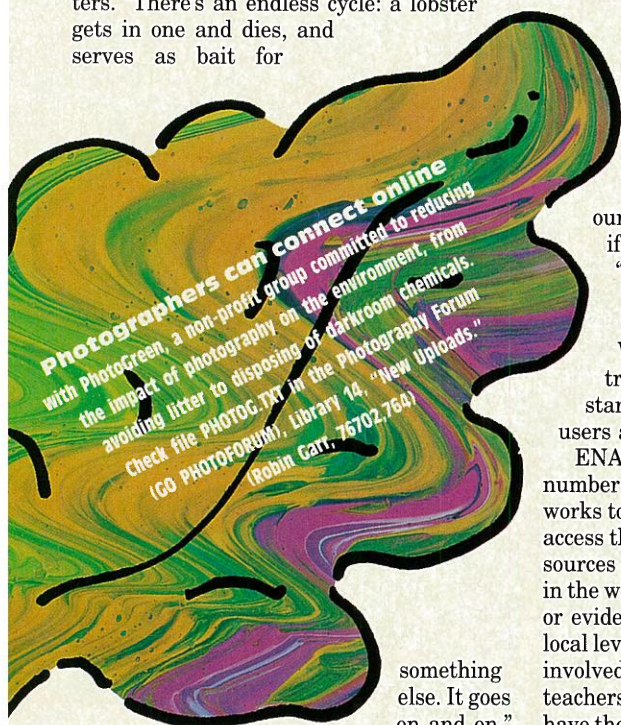
Safetynet Forum (GO SAFETYNET)

Section 11, "Environmental." Discussions may occur elsewhere; topics include political aspects in the Issues Forum (GO ISSUES), environmental law in The Legal Forum (GO LAW-SIG), and animal rights in Pets Forum (GO PETS). Talk also turns green in the miscellaneous topic sections of many forums.

own areas. "The goal of that program, and where participants used the online part very effectively, was that they shared the responsibility to figure it all out and solve it together, and learned the notion that global solutions are needed because it doesn't do any good to clean up one place if others aren't doing it elsewhere."

Above all, Carlson suggests participating, be it on a local BBS, or an international network such as CompuServe. "You can be part of a community of interest, and gather with people who are working on a project you can get involved in." The response to the Ikego forest effort was a case of individuals being attracted to help on a person-to-person basis, she adds, instead of a mass movement on a "global environet." "There's some value in people being able to tap into a huge information resource. But I don't think having the information makes a difference. People having an idea about what needs to be done and creating a body of concern around themselves to pursue it will be what ultimately makes the difference."

Christopher J. Galvin is an assistant editor of CompuServe Magazine.



something else. It goes on and on," says Hicks-Courant.

Some participants are marine biologists with appropriate expertise, he adds, "but we're looking for word from every diver who gets in the water."

Reducing the impact of the photographic industry on the environment is the word Bob

Enviro-Downloads: Forum Files from All Over

From restoring polluted waterways to farming the organic way, every aspect of the environmental movement is represented in CompuServe's forum libraries. Background information on conservation issues is frequently supplemented by up-to-date reports from the Sierra Club, Greenpeace and other organizations. Here's a brief list of some of the best files available:

ASTRONOMY FORUM (GO ASTROFORUM)

Historic Light Pollution Case—Particulars of a legal case between a backyard astronomer and the neighbors whose newly installed mercury vapor light made his observing site useless. Library 1, "Forum Help/General," LHTCAS.TXT.

EDUCATION FORUM (GO EDFORUM)

Environmental Gaming Simulation—A paper by Takeshi Utsumi of the Global University/USA and Philip Gang, director of the Institute for Educational Studies in Atlanta, on the need for an infrastructure to support global decision-making in the context of environmental preservation. Library 17, "Higher Education," GLOBAL.GAM.

GARDENING FORUM (GO GARDEN)

Green Manures—Primer on improving soil by using green manure crops—plants grown primarily for their effect on the soil. Library 2, "Vegetable Gardening," GRNMNR.TXT.

Resource List—Things you can do to help protect the environment, especially in glass, aluminum and paper recycling, and energy and water conservation. Library 9, "Earth Day/Ecology," EARTH.RSC.

Organization Addresses—Useful resource guide with complete address information, from the Arbor Day Foundation to Zero Population Growth. Library 9, "Earth Day/Ecology," ECOORG.TXT.

Muenchhausen October 1991—The October issue of *Muenchhausen*, a lively environmental and resource-minded electronic newsletter from Bootstrap Press. Library 9, "Earth Day/Ecology," MUNOCT.91.

Mobile Source Emissions—An article discussing automobile emissions, with particular attention to health risks, alternative fuels and the Clean Air Act of 1990. Library 9, "Earth Day/Ecology," AUTOEM.TXT.

GRAPHICS CORNER FORUM (GO CORNER)

Natural Images—About 20 GIF images from the forum's National Park series feature picturesque sites, including the Grand Canyon and Yellowstone. Various libraries; browse using the key word PARK.

HEALTH AND FITNESS FORUM (GO GOODHEALTH)

Energy Conservation—List of companies that provide information on how citizens can play a part in energy conservation. Toll-free numbers and addresses included. Library 8, "Whole Life Issues," ENNET.LST.

MACINTOSH HYPERTEXT FORUM (GO MACHYPER)

Green Alert!—Comprehensive HyperCard stack for the Macintosh with more than 150 environmental, energy and animal rights organizations listed, with names, addresses, fees and publications available. Requires HyperCard 2.0 to run. Library 6, "The HyperArtist," GREEN.CPT.

OUTDOORS FORUM (GO OUTDOORS)

Is Lake Jackson Dying? Biologists believe this north Florida lake can be saved. With Florida agencies and citizens groups, they've designed a management plan to keep the lake alive. Library 5, "Fishing," LJCKSN.FLA.

Camping Awareness—How campers can make their activities more environmentally sound. Library 10, "Camp/Hike/Walk/RV," ENVCMP.FEA.

Save the Planet—A global warming and ozone depletion program. The package includes a *Global Roulette* game and a list of Congress members to help generate informed responses on the issues. Includes many charts and graphs. Requires 512K RAM and CGA/EGA/VGA or Hercules graphics capability. Shareware. Library 16, "Environment/Wildlife," SAVEP.EXE.

PETS/ANIMALS FORUM (GO PETS)

Animal Activism—Article on animal rights activism by Laura Urian, assistant director of education at the Dolphin Research Center in the Florida Keys. Library 14, "Animal Rights," DRCNEW.TXT.

PUBLIC RELATIONS & MARKETING FORUM (GO PRSIG)

Green Marketing—Forum message thread discussing "green" marketing and its impact on business. Library 7, "Marketing/AMA," GREEN.STR.

Using Recycled Paper—Document prepared by Ria Fentiman, a communications consultant in Windsor, England, discussing recycling issues as related to employee communication. Library 8, "PR Bookshelf/IABC," RECYCL.TXT.

TBS NETWORK EARTH FORUM (GO EARTH)

Environmental Magazines—A list containing the names and addresses of magazines that focus on environmental issues, many available by subscription only. Library 4, "Eco-Consumerism," MAG.TXT.

Green Gift Guide—Suggestions for environmentally conscious gifts, with names and addresses of catalogs and suppliers. Library 4, "Eco-Consumerism," ECOGIF.001.

Waste Related Legislation—Summary by the Sierra Club of the progress of major environmental legislation through Congress. Library 7, "Legislation," WASTE.SUM.

Senate Score Sheet—The League of Conservation Voters records the votes of Senate members on environmental and conservation issues over the course of the year. Library 7, "Legislation," SENATE.LCV.

House of Representatives Scorecard—The League's environmental scores for members of the US House of Representatives. Library 7, "Legislation," HOUSE.LCV.

Chief Seattle's Reply—The 1854 reply by Chief Seattle of the Puget Sound Indians to a US government request to buy a large area of his people's land. Library 9, "Land Use/Wildlife," SEATTL.TXT.

Ozone—Discussion of ozone depletion and chlorofluorocarbons in the atmosphere, and what can be done about them. Library 10, "Air/Atmosphere/Climate," OZONE.TXT.

Wastewater Reclamation—One of the original authors of the Clean Water Act was a contributor to this paper introducing water reclamation. Library 11, "Oceans/Rivers/Lakes," WWRR.TXT.

Ocean Dumping—Thomas M. Socha wrote this detailed discussion of ocean dumping and its consequences on the environment. Library 11, "Oceans/Rivers/Lakes," OCEAND.TXT.

Whales—Detailed Greenpeace factsheet describing whale species and populations, past hunting practices and present agreements. Library 16, "Greenpeace," WHALFC.GP.

US Citizens Network Newsletter—Newsletters from the US Citizen's Network on the upcoming United Nations Conference of Economic Development. Library 17, "Earth Summit," NEWS07.CNU. (The number in the file name reflects the issue number, e.g. NEWS06.CNU, NEWS05.CNU.)

TRAVEL FORUM (GO TRAVSIG)

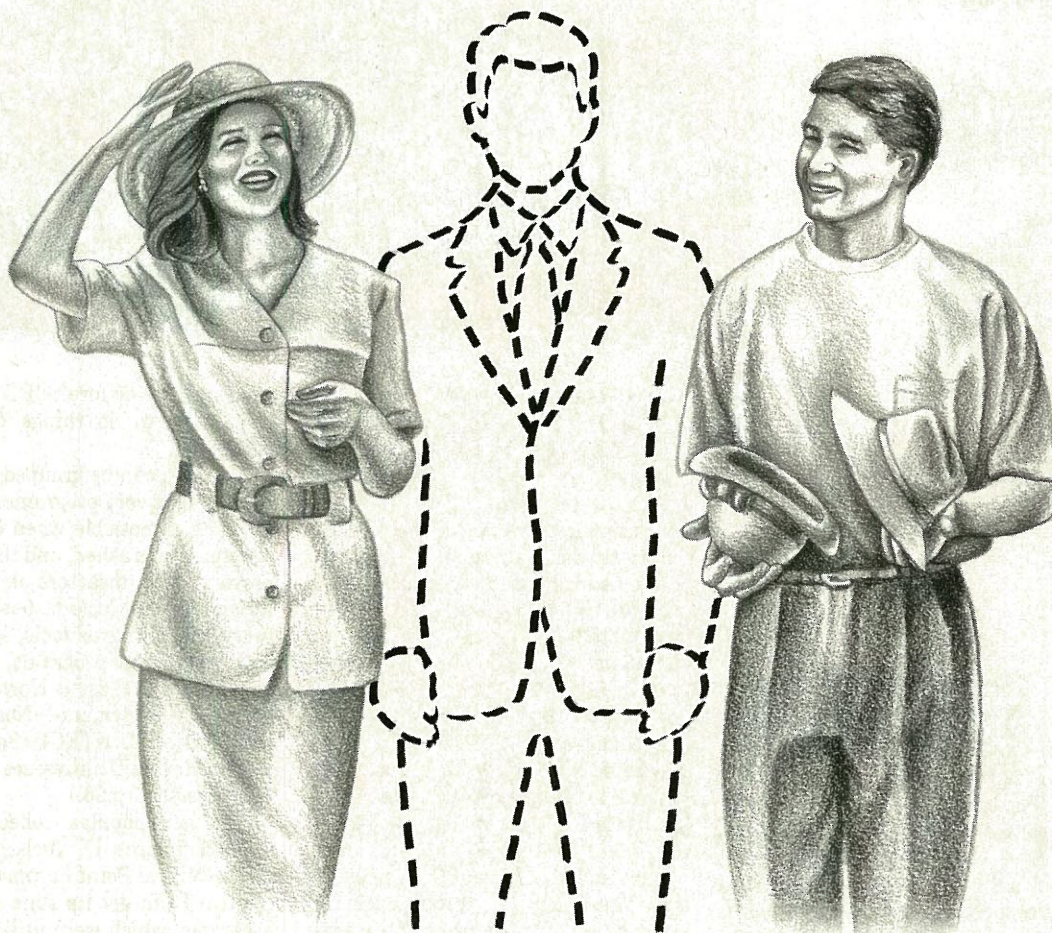
Chopstick Protest—Explains how part of the Japanese ecology movement has included a push to end the use of *waribashi*, disposable chopsticks. Library 7, "Asia," OHASHI.JPN.

WORKING FROM HOME FORUM (GO WORK)

Environmental Records—Discusses how to find records on environmental hazards. Library 4, "Info Professionals," ENVRNM.THD. ◀

—Paul Gilster

WE MAY LOOK LIKE THE OTHERS, BUT...



WE CUT OUT THE MIDDLE MAN — SO YOU GET LOWER PRICES.

You may think we're just another shopping service, but look again...Shoppers Advantage® On The Electronic Mall® gets you the best price — **10% to 50%** off the manufacturer's suggested list price — because we cut out the middle man.

Our network goes right to the source — **over 250,000** top-quality household and personal products from manufacturers like Maytag, Panasonic, GE, Nintendo — so there's nothing between you and the ultimate name-brand discounts except your modem.

How many other shopping services can boast a **Low Price Guarantee** that protects your savings? If you find the same item for less, you'll be refunded the difference.*

And...when others try to sell you more warranty, we'll give you extra coverage — Free. The warranty on any item you buy through Shoppers Advantage On The Electronic Mall is automatically extended to **two full years** from the date of purchase.*

But just because we cut out the middle man doesn't mean there's no one to help you if you need live assistance. Simply call our convenient toll-free number, **1-800-843-7777****, and a knowledgeable Shopping Consultant will be at your service.

So, cut out the middle man. Try Shoppers Advantage On The Electronic Mall for all your one-stop shopping. Enter **GO SAC**, or call us now at **1-800-843-7777** to get 3 months of savings for only \$1.

Then, unless you notify us otherwise, we'll continue your benefits for a full year and bill you only \$39. If you're not completely satisfied, you can cancel your membership during the first year for a **full refund**. That's right...a full refund. After all, looks are deceiving. We said we were different, and we are — in ways that help you save.

INTRODUCTORY OFFER: 3 MONTHS FOR \$1

* Conditions of our Low Price Guarantee and Automatic Two-Year Warranty Protection can be read online.

** Hours: Monday - Friday, 9 a.m. - 11 p.m.; Saturday and Sunday, 9 a.m. - 6 p.m. (ET).

SHOPPERS ADVANTAGE® On The Electronic Mall® is a registered service mark of, and provided by, CUC International Inc.

The Electronic Mall® is a registered trademark of CompuServe Inc.

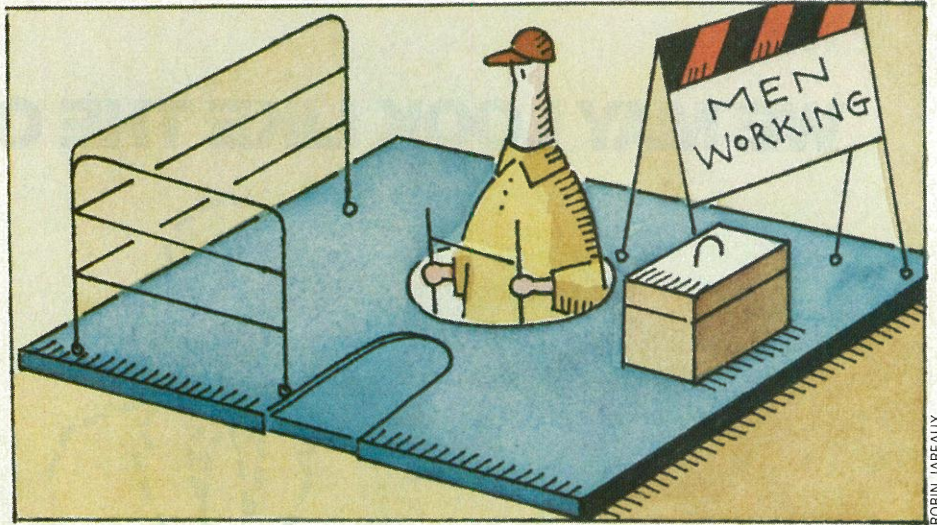
© 1991, CUC International Inc.

CSDAS3

Shoppers Advantage
ON THE ELECTRONIC MALL®

Software to Save the Day

by Harry Green



Utilities are the little programs that prevent or solve big problems and make the computing life easier.

Mike Beato, a Buffalo, N.Y., consultant who specializes in desktop publishing and multimedia applications on Macintosh computers, recently received a plea for help from a client who had lost some critical files on his hard disk. "He had a copy of Norton Utilities, so I was able to bring the same program up on my computer and walk him through the process of recovering it," Beato says. "As a consultant, I get called on to do a variety of things that clients aren't interested in learning. In my business, the goal is to be as productive as possible. Since every minute is important, I keep plenty of utilities on hand."

One axiom of the PC business is that when you're in trouble, you can never have too many utility programs. Whether the objective is to improve productivity, recover lost data, find a missing file, check the performance of a PC or disk, or simply back up a hard disk, we turn to utility programs. Even users who haven't bought one of the popular utility collections, such as Symantec's Norton Utilities or Central Point's PC Tools, use utility programs. We all have utilities that came with our operating systems, and use them to format and copy disks, display directories and bump programs to high memory to free more RAM for running applications.

Marshall Magee, president of Magee Enterprises, not only develops and sells utilities but also uses them extensively. His company develops products, such as Automenu and Treeview, that are supported on CompuServe's PC Vendor A Forum (GO PCVENA), Section 6, "Magee Enterprises." "People use utilities because these programs fill in the cracks between applications," Magee says. "I happen to like woodworking, and in my warehouse I have a woodshop full of tools such as saws, a shaper and a planer, but I need hand tools to use with them. That's

what utilities do for the PC user. They make it possible to do things more easily and quickly."

Utilities can be grouped into several categories. Recovery programs help you salvage as much as possible when disks or files are corrupted or trashed, and they may also help prevent such disasters in the first place. Recovery tools include backup and restore programs, antivirus tools, and unformatting and undeleting programs. The oldest and best known of these is Norton Utilities, supported in the Symantec/Norton Utilities Forum (GO SYMANTEC). (For more information on Norton Utilities, see "The Last Word: Peter Norton," p.26.)

Another popular collection is Central Point Software's PC Tools, which is covered in the Central Point Forum (GO CENTRAL). Central Point got its start with the Copy II programs, which were utilities that enabled users to avoid the copy protection that many developers were using. "The program did what we had hoped," says Matt Mossman, PC Tools product manager. "Developers took copy protection off, so in 1985 we turned to the general utility market. Our objective is to look at what users need and want, and give them that in the PC Tools package."

Another category of programs is file and disk managers. Until the latest version, 5.0, MS-DOS has always been awkward to use for such operations as copying an entire directory to floppy disks. Susan Gulick of Katonah, N.Y., loves XTree, a versatile file manager made by XTree Co. a division of Executive Systems Inc. She says, "For me it essentially replaces DOS, even version 5. I'm a computer consultant, and frankly can't imagine having to do serious work on a client's or my own PC without it."

Another classification of programs is diagnostic tools. Some of these are for troubleshooting, and some are for evaluating system performance. Ron Brugger of Riverside, Calif., is the computer guru in his company, and in supporting systems for other users, he finds it important to have a collection of utilities to diagnose problems rapidly. He

COMPUTING SERVICES

CM's Computing Services Credo:

For those who call out for advice, answers, even mere companionship in a discomfiting computer world, we throw you the online rope that connects to the main. No man is an island unto himself. Herein the CONTROL-G tolls for thee.

Troubleshooting Tools

Popular Utilities, p. 24

Peter Norton Q&A, p. 26

Multiplying Mice, p. 29

More Useful When They Work: A Downloading Primer

Suppose you've read about a utility you'd like to have, but you've never downloaded a file before. Or maybe you've always been mystified by how to compress and decompress files. What are self-extracting archives, anyway, and how do they work?

There's nothing more frustrating than downloading a file and finding that it doesn't work, or that you need to search other places to find the right tools to get the files unpacked. Here's a short course in what you need to know to use files you've downloaded from CompuServe. These tips apply to IBM-compatible computers, and with minor variations, to Macintoshes, Amigas and Ataris.

Any file with an extension of EXE, COM or BAT can be executed simply by typing its name. Some files you download can be run directly, while others are compressed to save storage space and transmission time. You don't need to know which type of file you've downloaded if it ends in one of these suffixes; just type the name and the program does the rest.

For example, after you've downloaded PKZ110.EXE, all you need to do is type PKZ110. This self-extracting file does the rest. It "explodes" itself into a series of files such as PKUNZIP.EXE.

Other files need a utility program to decompress them before they can be run. For example, suppose you want to use the program SHROOM.ZIP. The ZIP extension tells you this file was compressed using the program PKZIP. Before you can use it, you must decompress it using the PKUNZIP utility. To download and decompress the files, follow these steps:

1. First, download PKZ110.EXE. To do so, GO PCVENC. (PC Vendor C Forum, Library 11, "PKWare," is one of several places where PKZ110.EXE is located.)

2. Select the Communications Utilities library.

3. Type DOW PKZ110.EXE. The forum software responds with a list of file-transfer protocols. Your telecommunications software should support a protocol such as XMODEM, YMODEM, Kermit or CompuServe B. Consult your manual on how to activate it. Usually the protocol is activated by pressing a function key. When you have initiated the transfer, CompuServe does the rest, moving the file into your computer.

4. When PKZ110.EXE has finished downloading, go to the IBM Systems/Utilities Forum (GO IBMSYS), Library 3, "General Utilities." Download SHROOM.ZIP using the same process you used to download PKZ110.EXE.

5. Exit CompuServe and change to the directory on your hard disk where you stored PKZ110.EXE. Type PKZ110 and follow the instructions in the program.

6. After the program has finished decompressing, if it is in the same directory as SHROOM.ZIP, simply type PKUNZIP SHROOM.ZIP, and the program does the rest. The two files don't have to be in the same directory, but it is easier if they are.

When PKUNZIP finishes its work, you will have a program that you can run directly with no further effort. Be sure to send in the fees for using the programs. This will encourage developers to continue to distribute their software online.

uses Touchtone Software's CheckIt—a diagnostic utility that permits you to test all parts of your computer, run benchmarks and look for defective RAM chips. "To me, the value of utilities is that they let me get something done I can't do with DOS or an application program," Brugger says.

Many utilities are designed to improve your productivity, or just to make it easier to use your computer. Vern Buerg, of Petaluma, Calif., is well known to members of the IBM forums, where he is one of the sysops. Long before he became active in personal computing, he was a mainframe programmer and appreciated the value of utilities there. When he got his first computer in 1983, he recognized that certain essential utilities were missing, so he began writing them and adding them to his collection.

One of the most popular of Buerg's utilities is List76, an assortment of utilities that individual users can download from IBM-NET. He is also author of Autosig, a utility that automates CompuServe operations. (See box above for instructions on how to locate and download these programs.)

Buerg offers his utilities as freeware to individuals, but companies began contacting him asking for permission to use them in their packages. "I didn't start out to sell software," Buerg says, "Others asked for permission to license it, and the business developed itself."

Some of these simple programs quickly become indispensable. Legare Coleman of Wilton, Conn., computer technology manager for Philip Morris International, recommends SHROOM as such a program. "Did you ever



COMPUTERS
NOTEBOOKS
PRINTERS
HARDWARE

WORD PROCESSING
DESKTOP PUBLISHING
BUSINESS
ACCOUNTING
DATABASE
GRAPHICS
EDUCATIONAL
GAMES
BOOKS
ACCESSORIES
LEASING

Go TCS for specials on

Z-NIX HAND SCANNER
with iPhoto software for
Windows 2.x/3.0
\$129.95

ALL MEDIA FLOPPY DRIVES
Combination 3.5" and 5.25"
in a single half height design

**AVERY 1st IMPRESSION
DESKTOP BINDERY**

**Go TCS FOR
TOTAL
COMPUTER
SOLUTIONS**

SPECIAL CORPORATE PRICING

THE COMPUTER STORE™
VOICE (800) 445-2146
BBS (718) 268-1667
FAX (718) 268-2239

GO OLI for more information.

Utility Heaven: Popular Files for DOS, Mac and More

There are literally thousands of utility programs tucked among the forums on CompuServe. Many are shareware programs that can be downloaded and used by sending the developer a fee that is usually much less than the cost of commercial programs. Some are freeware programs that you can use at no cost other than the normal CompuServe usage charge to download them.

Many forums, such as those for IBM, Macintosh, Atari, Zmac and Amiga computer users, provide a File Finder, which helps you locate files by name, subject, author, key word or other criteria. Type FIND FILE FINDER at any CompuServe prompt for a list of file finders.

Here are some popular utility files that can be downloaded:

AMIGA USERS FORUM (GO AMIGAUSER)

Remapping Tool—An icon color remapping tool that swaps the colors from black and white. Drag all the icons you wish to remap on Remap Info's AppIcon to re-

color them. Library 15, "General Utilities," REMAP.LZH.

Zoo Decompressor—The latest version of Zoo, a file decompressor. Library 16, "Archivers/Crunchers," ZOO.EXE. File ZOO.DOC contains instructions.

Archiver—LZ is a utility that archives or extracts files in the LHA archive format. It also extracts files in the LZH format. Library 16, "Archivers/Crunchers," LZ.LZH.

APPLE USERS FORUM (GO APPUSER)

Text File Viewer—A popular launcher and file viewer, Sneeze also serves as a file printer, graphics viewer and file copier. Easily navigates disks and folders. Freeware. Library 4, "Utilities," SNEEZE.BXY.

File Converter/Copier—Chameleon is a general purpose Apple II series file converter/copy utility that can move files between all Apple II formats including Apple CPIM. Shareware. Library 4, CHAMEL.BXY.

PRODOS Patch—For Apple IIgs users. Gusboot patches ProDOS so that when Escape is pressed upon bootup, PRODOS-8 is booted, instead of the usual GSOS boot. Library 4, GUSBOO.BXY.

ATARI ST PRODUCTIVITY FORUM (GO ATARIPRO)

File Extractor—LHARC performs fast compressions and extractions. Library 4, "Utility Programs," LHA130.ARC.

Telebase—Keeps track of phone and fax numbers, allows you to dial out through a modem, and provides an appointment calendar. Freeware. Library 5, "Applications," TELEB1.LZH.

COMMODORE APPLICATIONS FORUM (GO CBMAPP)

Shell Utility—A powerful shell program created by Chris Smeets for the Commodore 128. Offers many new commands, including ARC128 and LHARC. Library 2, "ARC/Help/Forum Utilities," CS-DOS.SDA.

WHY DSI?

Worldwide Delivery

No Membership Fee

Discount Shopping Inc.
Electronics and Appliances
800/346-0707
GO DSI

GO OLI for more information.

shell back to DOS from an application and find that the program you are shelling from doesn't leave you enough memory to do anything else?" he asks. SHROOM has solved that problem for him. "It writes the program being shelled from into a temporary file so when you get back to the DOS prompt, you have almost all of your memory available."

Even users of Macintosh computers, which are renowned for ease of use, find utilities invaluable. Bob Brent of Thornhill, Ontario, uses a Mac IIx and relies on dozens of utilities, including his favorite, Super Boomerang, part of the NOW Utilities package. Super Boomerang remembers the folders you access most frequently, and lists them so you can open them without hunting. "The program gives me a tremendous productivity increase," Brent says. "Even though the Mac is easy to use, no one computer or operating system is perfectly tuned to an individual. Utility programs allow you to customize applications to your way of doing it."

"CompuServe has the best collection of utilities on the market," he says. The way to select the ones you want is to download the indexes of the forum libraries. Read the indexes offline, and pick out the titles you like best, using a tool such as Navigator. "My all-time record is downloading 31 utilities in one hourlong session."

An interesting trend in the industry today is the inclusion of utilities in the application programs themselves. For example,

COMPUTING SERVICES

the last two versions of DOS have included a shell program that has similar capabilities to many popular utility programs. DOS 5.0 now includes utilities for undeleting files and unformatting disks, a text editor and DosKey, which stores and plays back a string of DOS commands you have issued. All of these perform functions that other utilities provide, but in many cases the external utilities offer superior features.

With DOS and other applications carving into the market for utilities, will other programs that have been around longer be hurt? Marshall Magee doesn't think so. "When people see the shell in DOS 5.0, they start looking for a better product," he says. The commercial utilities usually are more sophisticated than the applications. "For example, DOS hasn't hurt the memory managers."

As PCs and their users become more sophisticated, demand for utilities will undoubtedly grow. Utilities help users get more from their PCs with less effort, which translates into improved productivity. Hidden on the shelves of your favorite software store or among the thousands of files in CompuServe's forums may be just the program you need to remove a roadblock you've been fighting. If you have such a need, ask in one of the forums. If the right utility isn't there already, maybe you'll inspire someone to write it.

Harry Green is president of Pacific Netcom Inc., a Portland, Ore., firm that consults with businesses on using office automation and telecommunications to improve productivity. His CompuServe User ID number is 70007,431.

IBM NEW USERS FORUM (GO IBMNEW)

Archiving Utility—Popular program for compressing and decompressing files. Library 2, "Library Tools," ARC-E.COM. See ARC-E.DOC for documentation.

IBM COMMUNICATIONS FORUM (GO IBMCOM)

File Extractor—This file extracts to Autosig, a freeware program for automating CompuServe operations. Library 1, "Autosig (ATO)," ATO68B.EXE. See ATO-DOC.EXE for documentation.

Extracting Program—Obtain the popular file compression utilities PKZIP and PKUNZIP from this self-extracting program. Library 2, "Comm Utilities," and also in the Zenith Forum (GO ZENITH), Library 5, "DOS Utilities," PKZ110.EXE.

IBM SYSTEMS FORUM (GO IBMSYS)

Shell Program—Used with application programs that allow you to shell to DOS. SHROOM moves the program you're shelling from into a temporary file and frees up

most of the RAM to run another program. Library 3, "General Utils," SHROOM.ZIP.

File-browsing Utility—Features file selection menu, selective printing, telephone dialer, scrollable windows and viewing files within archive files. Library 6, "File Utilities," LIST76.EXE.

MACINTOSH SYSTEMS FORUM (GO MACSYS)

UnStuffIt—Installs UnStuffIt Deluxe 2.0 to your hard disk. UnStuffIt Deluxe is freeware and "unstuffs" archives created with StuffIt 1.5.1, StuffIt Deluxe and StuffIt Classic. Library 0, "Upload Here and Help," UNSTUF.SEA.

Calendar—Das Calendar is a freeware application that draws a calendar. Library 6, "Utilities," DCALEN.BIN.

Navigator 3.04 Menus—Change, add or delete the command key combinations in the menus of CompuServe Navigator. Library 6, NAVMNU.SIT.

MACINTOSH NEW USERS FORUM (GO MACNEW)

Self-extracting StuffIt Classic—Contains the freeware decompression soft-

ware for UnStuffIt Deluxe 1.1 and Extractor. Library 3, "Using LIBs," DESTUF.SEA.

MACINTOSH HYPERTEXT FORUM (GO MACHYPER)

StuffIt Classic—Installs StuffIt Classic 1.6, a file compression utility, to your disk. Library 0, "Upload Here and Help," STUFFI.SEA.

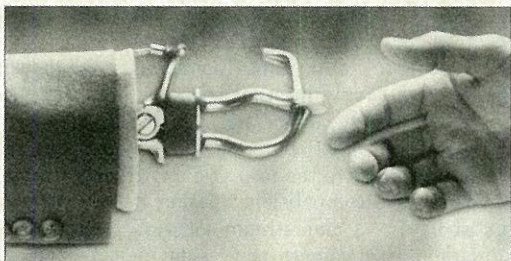
ZIFFNET (GO ZIFFNET)

Task-switching Utility—Back & Forth lets DOS users jump between as many as nine open applications without having to save files or formally close each application. Visit ZiffNet Library (GO ZNT:SOFTLIB), and choose Option 3, "Search the Library." Then choose Option 6, "Search by File Name" using BF112.ZIP.

ZMAC DOWNLOAD AND SUPPORT FORUM (GO ZMC: DOWNTech)

Browser Utility—Allows you to open any file and browse its contents. Freeware. Library 1, "Applications," BROWSR.SIT.

Sometimes the
worst thing about
having a disability is
that people meet it
before they meet you.

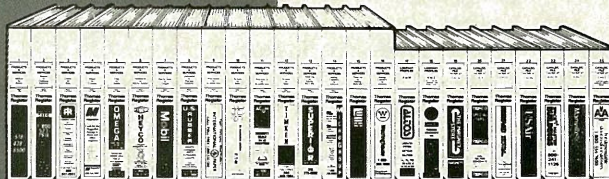


Remember, a person with a disability is a person first.
Awareness is the first step towards change.



CompuServe Users:

For simple, menu access to the
**THOMAS REGISTER
OF AMERICAN
MANUFACTURERS**



Just type

G·O·T·H·O·M·A·S

at any "!" prompt.

Need more information?

**THOMAS ONLINE
ONE PENN PLAZA
NEW YORK, NY 10119
212-290-7291**

GO OLI for more information.

The Last Word: Peter Norton on Utilities

To countless users who have erased a file in error, suffered a hard-disk crash, or simply wanted to evaluate the performance of their PC, the name Peter Norton is a household word.

Norton founded Peter Norton Computing Inc. in 1981 to market Norton Utilities, the first major set of utility programs for the IBM PC. His programs, considered the industry standard for data recovery, are supported in the Symantec/Norton Utilities Forum (GO SYMANTEC).

Prior to founding PNCI, Norton was a computer consultant and programmer analyst at the Jet Propulsion Laboratory in Pasadena, Calif., and other companies. He attended Reed College in Portland, Ore., and holds a bachelor's degree in mathematics from the University of California at Berkeley.

In addition to being an industry expert, Norton has authored *Inside the IBM PC*, *Programmer's Guide to the IBM PC* and *Peter Norton's Inside OS/2*. He also has co-authored *Peter Norton's Assembly Language Book for the IBM PC*, *The Hard Disk Companion* and *Peter Norton's Guide to the Norton Utilities 6.0*.

CompuServe Magazine recently asked Norton for his views on utility programs.

Q: It's been almost 10 years since you founded your company. What convinced you that there was a market for your product at that time?

A: Actually, I wasn't sure there *was* a market. I figured if I ran into this problem of accidentally erasing a file, then there might be others who needed to unerase a file.

Q: What are the most significant changes you've seen in the development of utilities since then?

A: Less technical and more automation. To broaden the market we needed to change the approach of utilities. We modified the user interface, making it simpler for the non-technical user, and used jargon that was less frightening. We also made all of the products more automated. This allows an everyday user to benefit from the utility without having to know how it works. At the same time, the advanced user can get in there and get his hands dirty.

Q: Why have utilities become so popular? Is it because people want programs and add-ons that will increase efficiency and save time, or are there other reasons?



STEVE CRISE

They're still not in the mainstream, but utilities' ease and automation will help: Norton

A: Actually, utilities still haven't come into the mainstream. During the last two years, though, the utility market has been the fastest growing software market because utilities are becoming easier for the non-technical person to use. The functionality hasn't changed much—just the ease of use.

Q: If you were creating a standard survival kit of utilities that everyone should have, what would you put in it and why?

A: Customers have told us they want backup, unerase, viewers, a disk doctor, quick access, virus protection, hard-disk optimizing tools and file compression.

Q: What's considered state-of-the-art in utilities today?

A: Most of the leading disk-based utility packages and the leading backup software packages are on the forefront of technology. The network utility market is ripe, but the products in this area have a ways to go. The Windows utility market isn't as mature as DOS, but will grow within the next two years.

Q: Why did you develop your Norton Desktop for Windows product, which is considered more than a regular utility?

A: It's the same reason I marketed UnErase: I thought other users would also have a need for it. When we developed the Norton Desktop for Windows, we asked ourselves: If we could work with Windows any

way we wanted, what would that be and what software would it include? Of course, NDW includes products from our DOS line, including Backup, Norton Disk Doctor, FileFind and UnErase. However, we also included many Windows-specific utilities such as the Quick Access feature, the File Manager replacement, the Icon Editor, Screen Savers and Key Finder.

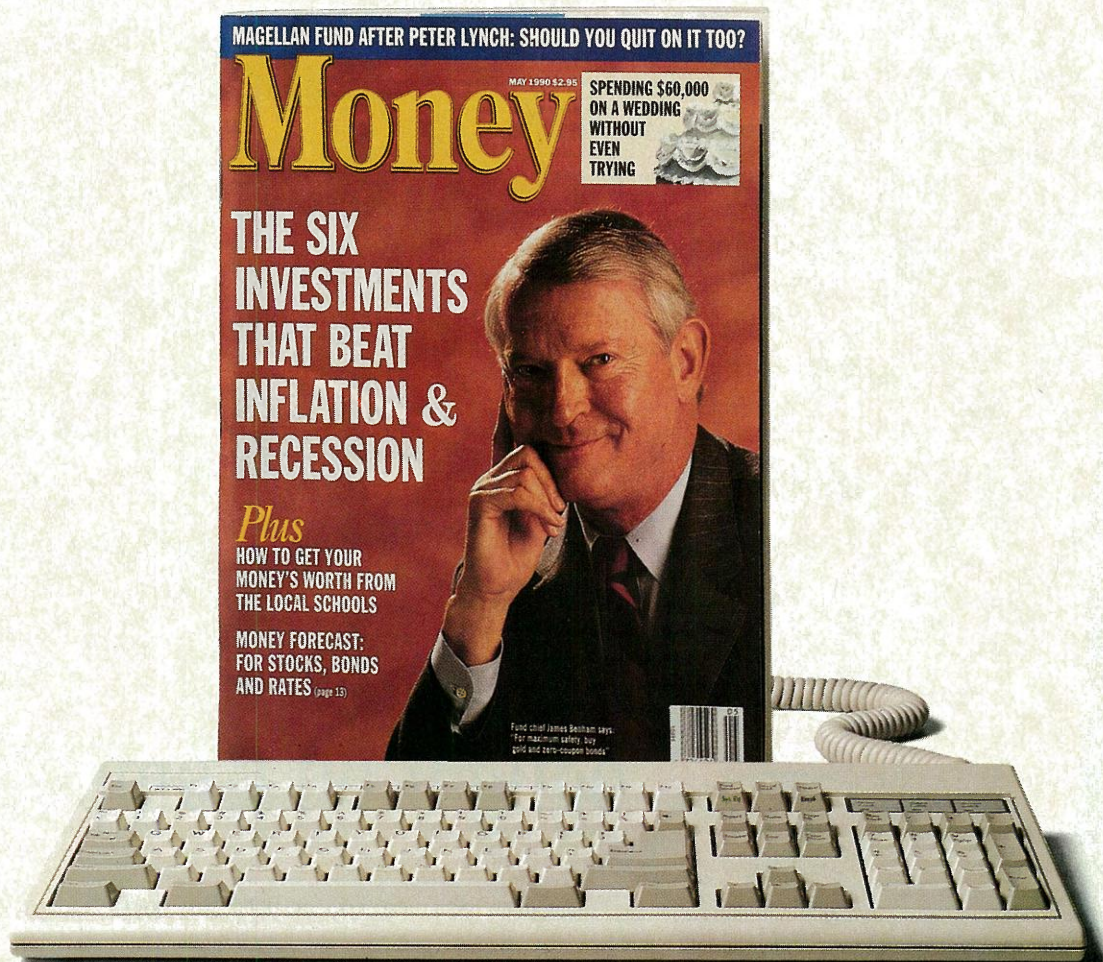
Q: What kind of response has Norton Desktop for Windows received so far?

A: Every major magazine has given the product favorable reviews, and it was nominated for *PC Magazine's* Technical Excellence Award and won *PC/Computing's* Most Valuable Product award at Comdex.

Q: Increasingly, application software has utility functions built in. For example, most word processors have file search capability. Do you see this as diminishing the need for commercial utility packages?

A: Some functionality is appearing not only in other software products but also in the operating system itself. However, that functionality is often inferior to what we can give the user. We strive to stay ahead of the competition, whether it be a utility vendor or a mainstream software product. The utility business thrives on new technological advances. We must continue to develop innovative products.

—Harry Green



Now Available On CompuServe.

Planning for your financial future has just gotten easier.

CompuServe's Money Magazine Financial Information Center helps you identify opportunities that meet your personal investing needs. Online mutual fund screening lets you quickly sift through over 1,500 mutual funds based on criteria that's important to you — including investment objectives, returns over various time horizons, fund manager fees and expenses, and more. You can take advantage of insights and practical advice from the MONEY editorial staff, participate in forum discussions, and get software support for *WealthBuilder™* by MONEY Magazine.

The Money Magazine Financial Information Center, available on CompuServe. Type GO MONEYMAG at any ! prompt. And start planning for your financial future.

CompuServe®

MONEY is a registered trademark of The Time Inc. Magazine Company.

23 Sept. '17

17:35 hours

Then dogfight we would! I accepted Von Richt hofen's challenge without hesitation. After all, the despicable Fokker had downed my dear chum Bates only days ago. I spied the Baron's fighter plane at 10 o'clock. I closed in. My mission ~~was~~ down him before he downed me.

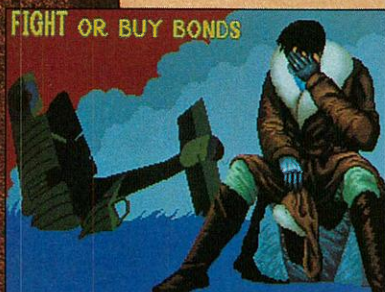


ogfight on CompuServe!

Transform your computer into the cockpit of a WWI fighter plane by playing Knights of the Sky™ on CompuServe. You'll feel the excitement of aerial combat as you use this flight simulator to maneuver your plane and attack the most scurrilous fighter pilots in the world—aces you meet in CompuServe's Modem-to-Modem Gaming Lobby™

To make it easy to get your wings (and MicroProse's Knights of the Sky software), we're making this special offer:

- + Order Knights of the Sky from Computer Express (GO CE) in February for only \$23.99 (that's over 50% off the retail price) and you'll get a \$5 usage credit, too.
- + Once you have the software, GO MTMGAMES to find an opponent and dogfight!



(Actual Game Screens)

MICRO PROSE
simulation • software

THE ELECTRONIC M·A·L·L

FEBRUARY 1992



FEATURED THIS MONTH
IN *THE ELECTRONIC
MALL* ARE HIGH-TECH
TOYS FOR ALL AGES. TO
CHECK OUT THE LATEST
INNOVATIONS FOR YOUR
PROFESSIONAL AND PER-
SONAL LIFE, GO MALL.

Join The Electronic Mall Elite and Receive a \$2.50 Credit, See pg. 10

Win a Trip For Two to the Baseball Game of Your Choice, See pg. 14

Order Last-Minute Valentine Gifts Online

CONNECT-FREE SHOPPING 24 HOURS A DAY, 365 DAYS A YEAR

THE ELECTRONIC M·A·L·L

LOOK FOR THESE SIGNS OF
SPECIAL INTEREST.

**BEST
BUY!**

A super value offering you savings
of up to 80%



Find any item pictured here fast by typing
99 after a store's GO command

**NEW
MERCHANT**

An all new store for you to
shop connect-free 365 days a year

BEST BUYS	15
VALENTINE GIFTS	3
AUTOMOTIVE	13
COMPUTERS	6
ELECTRONICS	1
SHOPPERS GUIDE	10
NEW MERCHANTS	16



COBRA INTENNA® CORDLESS PHONE

Enjoy clear-call circuitry and crisp sound with this state-of-the-art cordless phone. The handset features a built-in antenna. A Secur-Loc® system with digital security codes prevents you from receiving transmissions from other cordless phones. Other features include flash, last-number redial and wall-mount option. Includes a rechargeable battery and 120V, AC, UL-listed adapter. Available in blue and ivory.

**JCPENNEY. GO JCP
INTENNA CORDLESS PHONE \$89.99
\$79.99 AFTER MARCH 17**



SAVE OVER \$75 ON A CASIO COLOR TV.

This hand-held color TV features a 2.2 inch high-resolution, backlit LCD screen for improved color, brightness and image clarity. Comes with telescoping antenna, earphone jack, AC and auto inputs for optional adapters. Receives UHF channels 14-69 and VHF channels 2-13. Limited warranty. Ordering is for members only. Not a member? Join online today.

**SHOPPERS ADVANTAGE CLUB. GO SAC
LIST PRICE \$199
CLUB MEMBERS PRICE \$122.61**



FEIN RANDOM ORBIT SANDER

This 6-inch diameter sander has 50% more surface area than standard 5-inch sanders. When attached to a vacuum source, it extracts dust directly through the perforations in the sanding pad. Side vents pull in anything that passes outside the perimeter of the sander, eliminating nearly 100% of the dust! The fully balanced rotor makes this the smoothest running random orbit sander available. Weighs only 3.7 pounds.

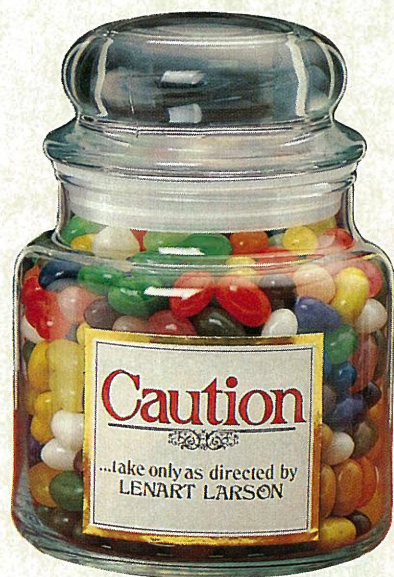
**GARRETT WADE WOODWORKING. GO GW
ORBIT SANDER #636 \$599**

TASCO COMPACT BINOCULARS

These Tasco® 7-power binoculars with In-Focus optics never need focusing. The perfect companion for sporting events, concerts and outdoor activities, such as birdwatching. Binoculars have 342-feet depth of field at 1,000 yards.

**SHARON LUGGAGE AND GIFTS. GO SL
TASCO BINOCULARS \$79.95**





SEND A GIFT WITH A PERSONAL FLAVOR.

Figi's has the tasteful answer. Send 20 tongue-tingling flavors of Jelly Belly®, the original gourmet Jelly Bean®, delivered in a personalized glass candy jar. Imagine your recipient's pure delight when indulging in flavors, such as tutti frutti, grape cooler, raspberry flip, bubble gum and peach melba. Figi's includes a flavor menu and recipes for treats, including Lemon Meringue Pie, Black Forest Cake and Chocolate Peanut Butter Cup—all made with delicious Jelly Belly flavors.

FIGI'S GIFTS. GO FG
JELLY BELLY CANDY JAR \$16.99

SAY "I LOVE YOU" WITH THE FTD FLOWER BASKET BOUQUET.

Let this basket full of flowers express your heart full of love! Each hand-painted white bamboo basket is filled with red carnations, astrolmerions and white daisies.

WALTER KNOLL FLORIST. GO WK
FLOWER BASKET BOUQUET \$29.95

FOR MORE GREAT IDEAS, GO MALL
AND SELECT THE YEAR-ROUND
GIFT GUIDE.



GIVE LOVE 365 DAYS A YEAR WITH THE VALENTINE CALENDAR.

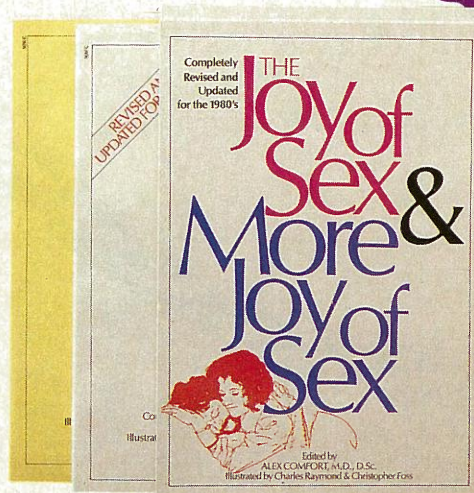
This unique calendar begins on Feb. 14, 1992! For every day of the year, the 365 Days of Love Valentine Calendar offers a different way to say "I Love You." Celebrating with poetry, passion, irreverence and wisecracks are Dante and Duke Ellington, Helen Hayes and John Lennon, Sappho and Shakespeare, and many more!

COURT PHARMACY. GO RX
VALENTINE CALENDAR \$6.95

SEND CUDDLY VALENTINE'S DAY GREETINGS WITH THE TEDDY BEAR WITH A ROSE.

This handsome, huggable 12-inch teddy bear comes bearing a red silk rose. Available in deep brown, black and dark gray.

BRETON HARBOR BASKETS & GIFTS. GO BH
TEDDY BEAR WITH ROSE \$27.95



CELEBRATE YOUR LOVE WITH THE JOY OF SEX AND MORE JOY OF SEX.

Alex Comfort's best-selling classic *Joy of Sex* is joined by its sequel companion book *More Joy of Sex*. Together, these volumes provide detailed information and suggestions on how you can be more inventive and carefree in your most intimate relationships. A gift you will both enjoy!

BARNES & NOBLE. GO BN
BOXED SET \$33.90



GIVE A GIFT OF GOLD.

This custom-made, 18-karat gold, Italian herringbone braid necklace measures 20 inches. Makes an exquisite year-round offering for him or her.

**RODEO MILE PRECIOUS STONES. GO ROD
20-INCH GOLD NECKLACE \$959**

ENJOY CLASSIC ELEGANCE WITH THE PINPOINT OXFORD COTTON BUTTON-DOWN SHIRT.

This unique and distinctive dress shirt combines the classic button-down collar with the elegant look of French cuffs. Single-needle tailored in the finest imported pinpoint oxford cotton, the shirt features a 3¾-inch button-down collar, left breast pocket, seven-button front and long shirt tails. Available in white, blue or pink. A Paul Fredrick Shirts exclusive. Cuff monograms available for an additional \$5.

**PAUL FREDRICK SHIRTS. GO PFS
OXFORD DRESS SHIRT \$37**

EXPLORE THE COSMOS WITH CARL SAGAN.

Get aboard the spaceship of the imagination as *Cosmos* takes you on an awesome journey through time and space. With Dr. Carl Sagan as your guide, you will voyage to the edge of the Universe, the nucleus of a cell, the beginning of time and 5 billion years into the future. This complete video set contains all 14 episodes of Sagan's multiple-E Emmy-winning PBS-TV series gift-boxed on seven videos. Also included is a free *Cosmos* book.

**YES! BOOKS AND VIDEOS. GO YB
COSMOS VIDEO SET \$199.98**

BEAUTY AND THE BEAST BONANZA

Select from a wide array of merchandise inspired by *Beauty and the Beast*, Disney's 30th full-length animated feature film. Among the featured items: Low-Top Sneakers (\$16), Castle Backpack (\$16), Print Legging Set (\$27), Beauty and the Beast T-Shirt (\$12), Plush Beast (\$48), and Beauty and the Beast Snowglobe (available March 1, \$40).

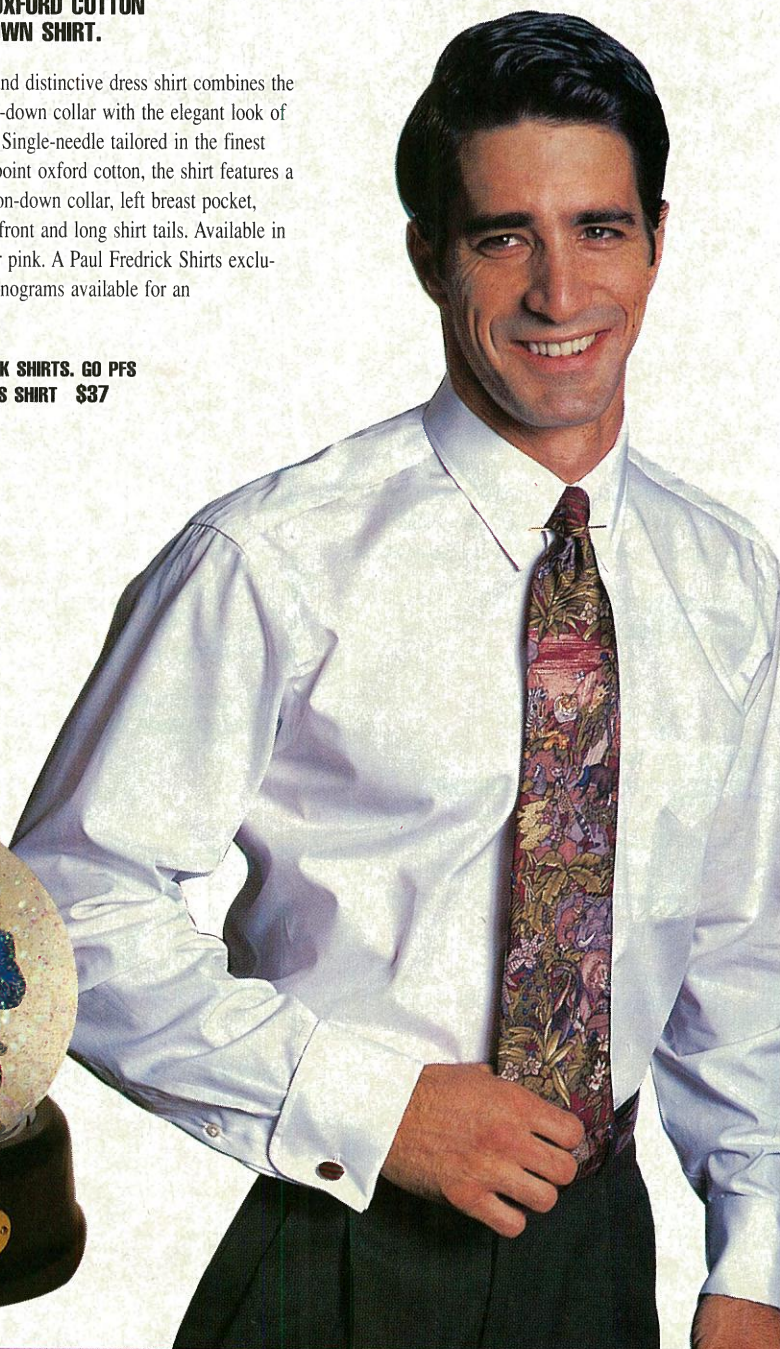
THE DISNEY CATALOG. GO DS



TREAT SOMEONE SWEET TO FLORIDA TEMPLE ORANGES.

Recognized as Florida's premier eating orange, the Temple is easy to peel and section and is delicious to eat. Sweet and flavorful, the Temple makes a perfect healthy gift choice for Valentine's Day, birthdays, anniversaries, or any occasion! Why not treat yourself, too? All fruit is guaranteed to arrive fresh and bursting with flavor. Delivery included in price.

**FLORIDA FRUIT SHIPPERS. GO FFS
TEMPLE ORANGES AND RUBY RED GRAPEFRUIT,
½ BUSHEL \$27.95**

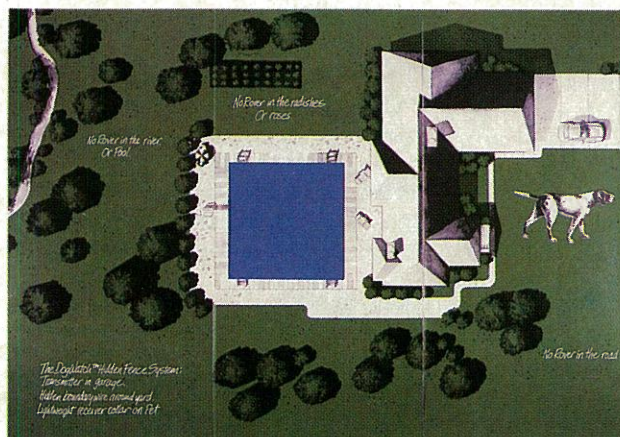




OPEN JARS AND BOTTLES AUTOMATICALLY.

With Open Up Jar Opener you can open any tightly closed jar or bottle automatically. This cordless, electronic opener applies three to five times the twisting power of the average human hand! Mounts under any cabinet or shelf. Uses four "D" batteries (not included). Request a **free** print catalog for more cutting edge kitchen tools and appliances.

THE CHEF'S CATALOG. GO CC
JAR OPENER \$34.99



KEEP YOUR DOG "FENCED IN" WITH THE HIDDEN FENCE SYSTEM.

Now you can keep your dog "fenced in" without putting up a high, unsightly fence. The Dog Watch Hidden Fence System is a thoroughly proven and humane way to keep your dog inside an area as large as 25 acres or as small as 1/4 acre—it

keeps an "eye" on your dog by transmitting a harmless radio signal through a boundary wire installed around your yard at or just below ground level. Your dog wears a receiver collar tuned only to the signal from the wire. When your pet gets within 5 to 10 feet of the wire, an audible warning on the collar serves as a reminder that he or she is too close. If the warning is ignored by your pet, the collar emits a harmless shock. Request a **free** print catalog for more high-tech pet behavior and training aids.

PETWORKS. GO PT
HIDDEN FENCE CLUB PRICE \$559.99
\$699.99 FOR 1 ACRE COVERAGE

ENJOY GREAT DIGITAL SOUND WITH THE SONY® DISCMAN.

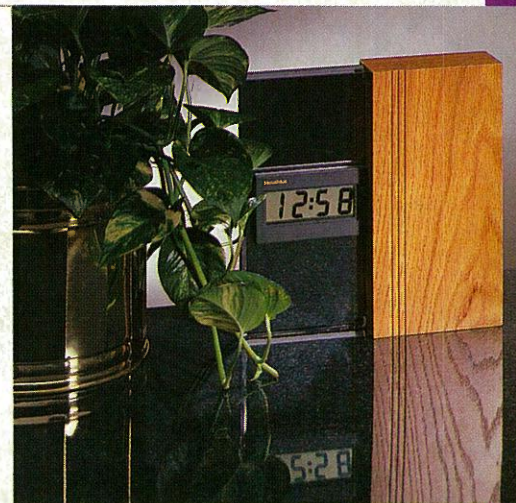
This portable unit programs 20 selections to play in any order. Features include 8x oversampling, shuffle play, repeat modes, MegaBass sound and LCD display. Automatic music sensor system skips forward or back to the beginning of a track at the touch of a button. Enjoy eight hours of play from four "AA" batteries. Includes stereo headphones and AC adapter. 110/120V, AC. UL listed.

JCPENNEY. GO JCP
SONY DISCMAN \$169.99

ENJOY WESTMINSTER CHIMES IN A CONTEMPORARY, TABLE-TOP CLOCK.

Fill your home with the sound of Westminster Chimes, just like those heard from the famous Big Ben in London! This handsome, contemporary clock combines solid oak with a mirrored face, beveled for a high quality look. Both the chimes and the rich, background "tick-tock" are digitally synthesized with separate volume controls. For a night of peaceful sleep, set the chime volume to lower automatically between 11 p.m. and 7 a.m. Includes battery backup and 12-foot cord. Request a **free** print catalog for more home automation products.

THE HEATH CO. GO HTH
TABLE-TOP CLOCK \$179.95





MAXIMIZE YOUR GUITAR SOUND WITH THE ZOOM 9002.

Loaded with an arsenal of awesome sounding 16-bit digital and analog effects, the Zoom 9002 lets you link as many as six effects together to produce dramatic new sound combinations. The 9002 is also a versatile live-effects console which gives you the choice of as many as 40 exciting programs that can be accessed instantly via a handy, low-profile guitar remote controller. This ultra-solid, ultra-compact 9002 effects processor brings together everything you need to create a wide panorama of effects to enhance recording sessions, live performances and practice situations. Check out the complete list of features online. Request a **free** catalog, too.

DISCOUNT MUSIC SUPPLY. GO DMS
9002 EFFECTS PROCESSOR \$353.95



OLEI, A VCR WITH BILINGUAL PROGRAMMING

This one-year/eight-event on-screen programmable VCR will display in English or Spanish! Control it from your chair with the 65-function remote. Four video heads provide noise-free special effects and the convenient front-mounted A/V jacks make plugging in additional equipment, such as your camcorder fast and easy.

SEARS. GO SEARS
BILINGUAL VCR \$264.99



GET A DIGITAL WATCH AND PORTABLE DATABANK WITH WRISTMAC 2.5.

WristMac 2.5 from Ex Machina doubles as a full-featured Seiko digital watch and a portable data bank. It displays two 12-character lines, and accepts HyperCard data and text files. Also includes import software and a cable to connect to a Mac Plus, SE or II.

MACWAREHOUSE. GO MW
WRISTMAC 2.5 \$99



THE COMPUSERVE COMMITMENT TO ELECTRONIC SHOPPING



At CompuServe, we are dedicated to providing you with the best products, services and information available in a continually expanding Electronic Mall. We welcome your comments and suggestions.



Shop The Electronic Mall Connect-Free Every Day

Standard CompuServe connect-time fees have been dropped at The Electronic Mall®. Now you can leisurely browse any of more than 100 stores, including Shoppers Advantage Club, at your leisure 365 days a year, without paying standard connect-time charges. (Applicable communications surcharges remain in effect.)

8 Easy Steps to Shopping The Electronic Mall.

GO MALL to zip to the world's first electronic shopping mall. The Electronic Mall puts over 100 stores, all free of standard CompuServe connect charges, at your fingertips. Leading retailers like JCPenney, Hammacher Schlemmer, and Brooks Brothers. Smaller speciality shops such as Coffee Anyone ???, Florida Fruit Shippers, and Executive Stamper. And, computer stores such as Computer Express, Direct Micro, and Sierra Online with the latest in hardware, software, peripherals, and supplies, often at rock bottom prices.

#1: Relax. Take Your Time. Remember, The Electronic Mall is connect-free 24 hours a day, 365 days a year. Browse the online directory by store name or department. Check out "This Week's Mall News" for bulletins on new stores, special sales, contests, and connect-time rebates. Take your time. The connect clock is off.

#2: Have Your Credit Cards Handy. Most major credit cards are accepted by all Mall stores. Read each merchant's "How To Order" section before you place an order as payment methods vary. Use the directory on pages 8 and 9 as a quick guide.

#3: Zip Right To Your Favorite Store. In a hurry? Head straight to your favorite store. Every store has a unique GO code. You will find these GO codes in the directory on pages 8 and 9 and online in the Mall directory.

#4: Key "O" To Order. When you have selected your purchase, key the letter "O." Your order will be stored in a personal file until you are ready to checkout. You can continue shopping in a store, selecting additional items for purchase, or you can head directly to the checkout counter.

#5: Type "Checkout" to Complete Your Order. When you are finished shopping in a

store, type "Checkout." You will be prompted for size, color, delivery method, and other key information. You can cancel your order at any point by typing "Exit." You will also be asked to specify your name, address, phone number, and payment method. Don't worry. This information is confidential.

#6: Review Your Order Summary Carefully. Once you have responded to all prompts, you will receive an order summary. Review it carefully. You have the option of changing any/all of your order. You must complete or cancel an order before leaving a store.

#7: Keep a Copy of Your Order Confirmation. Most stores offer you the option of requesting an order confirmation via CompuServe Mail. Use the confirmation number if you need to inquire about your order.

#8: Tap a Store's Expertise. If you have a question about a product or service, contact the store's manager. Each store is staffed by real people eager to serve you and answer your questions. Many stores post their toll-free 800 numbers, Fax numbers, and CompuServe Mail numbers online. Most also have a "Talk to Us" section. Take advantage of their expertise and free technical support.

THE ELECTRONIC MALL QUICK REFERENCE CHART

Use this handy table when
placing your order.

Merchant	Go Code	es					ss			sts	ss	ronics				ard	y Order																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																</
----------	---------	----	--	--	--	--	----	--	--	-----	----	--------	--	--	--	-----	---------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

[illegible]

Win a trip for two to the baseball game of your choice in The Mall's *Grand Slam* contest.

Enter The Electronic Mall's *Grand Slam* contest for your chance to win a trip for two to the baseball game of your choice, subject to availability. Cheer on the New York Mets at Shea Stadium. Root for the Red Sox in Boston's Fenway Park. Say hooray for the boys from L.A. in Dodger Stadium. The choice is yours, any American or National League game coast-to-coast! The Grand Prize includes round-trip air transportation for two, a two-night stay in a luxury hotel and tickets for two to the game. To be eligible to win, all you need to do is run the bases online. Select "The Mall's Grand Slam" for a clue on how to get to first base. Each base has a clue on how to get to the next base. When you hit home plate, answer that week's baseball trivia question correctly and your name will automatically be entered in the Grand Prize drawing. You can enter again every week for nine weeks, beginning Feb. 1. The grand-prize drawing will be held on Opening Day, April 6. Complete rules and regulations online. Win one of over 100 other great prizes, including:

- (3) An autographed official baseball. Select from Mickey Mantle, Henry Aaron, Roger Clemens, Willie Mays, Reggie Jackson, Dwight Gooden, Yogi Berra, Tom Seaver and more. Compliments of Hammacher Schlemmer. GO HS
- (3) Swingster Major League Baseball Shirts from the Cooperstown Collection. Select from Dodgers (Snider), Yankees (Ruth), Indians (Feller), Cubs (Williams) and Cardinals (Musial). Compliments of JCPenney. GO JCP
- (3) Baseball software. Select from Earl Weaver Baseball II by Electronic Arts, Earl Weaver Baseball Stats II by Electronic Arts and others. Compliments of Computer Express. GO CE
- (3) Legends of Baseball Sports Tin. This 3.5-gallon tin comes heaped with cheese popcorn, seasoned popcorn and sweet, chewy caramel corn. Includes 220 "Collector Series" baseball cards, too! Compliments of Figi's. GO FG
- (3) Baseball Sports Mug. This mug is an exact replica of a baseball, right down to the stitching! Compliments of Coffee Anyone ??? GO COF
- (100) CompuServe Baseball Cap. This sturdy blue baseball cap features the CompuServe logo! Compliments of Penny*Wise Office Products. GO PW

For your chance to win GO MALL.

Order last-minute Valentine's Day gifts at The Mall.

There is still time to order gifts online for Valentine's Day. Browse a special selection of Valentine's suggestions in the Electronic Mall's Year-Round Gift Center. More than 100 ideas from an array of Mall merchants are showcased in the easy-to-use guide. Select diamond earrings from Rodeo Mile Precious Stones (GO ROD) ... a dozen long-stemmed roses from The Flower Stop (GO

FS) ... a cuddly Valentine bear from Breton Harbor Baskets & Gifts (GO BH) ... Mickey Mouse boxer shorts from The Disney Store (GO DS) ... one dozen dark chocolate roses from Fancy Foods & Specialty Gifts (GO FF) and a 14 kt. gold-filled Cross pen from Sunglasses, Shavers & More (GO SN). To find the perfect way to say "I Love You," GO MALL.

How to Place an Order

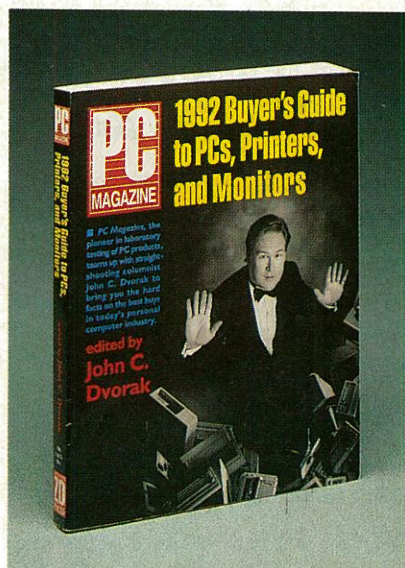
When you see a product you would like to purchase simply key "O" to order. Imagine you are putting an item in an electronic shopping cart. You can continue shopping in a store, adding more items to your cart, or you can head directly to the checkout counter by typing "Checkout." An electronic order form will appear and you will be prompted for all pertinent information, such as size, color, delivery method, and credit card billing. Remember, you can cancel your order at any point by typing "Exit." Once your order is complete you will see an order confirmation, giving you another chance to change all or part of your order.

Shipping Information

Shipping destinations and methods differ from store to store. Many stores will ship virtually anywhere in the world. Others limit shipping to the U.S. and Canada, or the U.S. only. Shipping options differ, too. In addition to standard UPS ground, many merchants also offer one, two or three day rush delivery for an added fee. In some cases, the price online includes shipping and handling anywhere in the continental U.S. You will find a handy guide to each store's shipping policies in the print directory on pages 8 and 9 or in the online Mall directory.

Join The Electronic Mall Elite and Receive a \$2.50 Usage Credit.

Join The Electronic Mall Elite online and automatically receive a **\$2.50** CompuServe usage credit. As a member of Electronic Mall Elite, you will receive a monthly electronic communicate with exclusive news about special offers, **free** gifts, upcoming promotions and seasonal sales. All offers are for club members only. To join, simply complete the online Member Profile. For details, GO MALL.



PC MAGAZINE'S 1992 BUYER'S GUIDE TO PCS, PRINTERS AND MONITORS

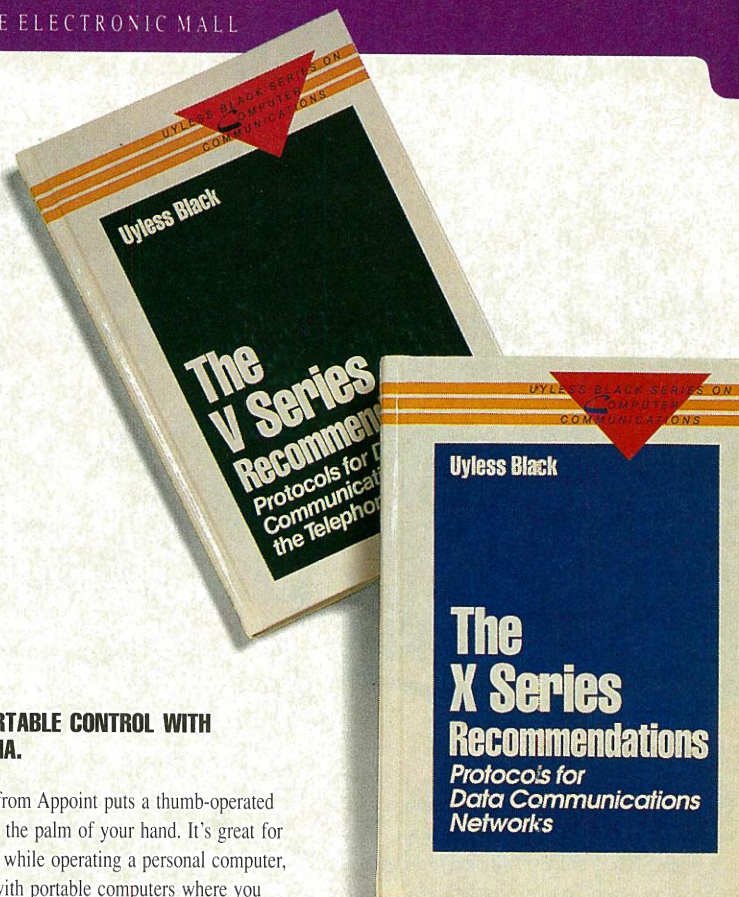
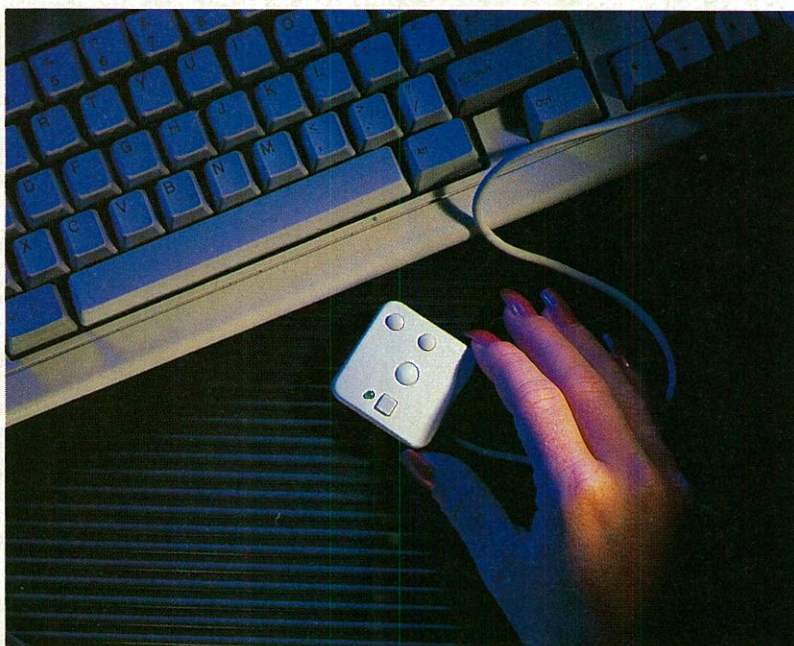
Edited by John Dvorak, this comprehensive up-to-date guide outlines various technologies and terms in layman's terms so you can intelligently compare products. Includes the results of numerous product tests conducted at *PC Magazine*.

WALDENCOMPUTERBOOKS. GO WB
1992 BUYER'S GUIDE \$19.95

ENJOY PORTABLE CONTROL WITH THUMBELINA.

Thumbelina from Appoint puts a thumb-operated trackball into the palm of your hand. It's great for presentations while operating a personal computer, and for use with portable computers where you don't have space for rolling a mouse around. The unit includes a drag lock key so you can drag objects across the screen without holding down the button. It mounts easily to the side or top of your keyboard, and gives you complete cursor control!

MICROWAREHOUSE. GO MCW
THUMB-OPERATED TRACKBALL \$69

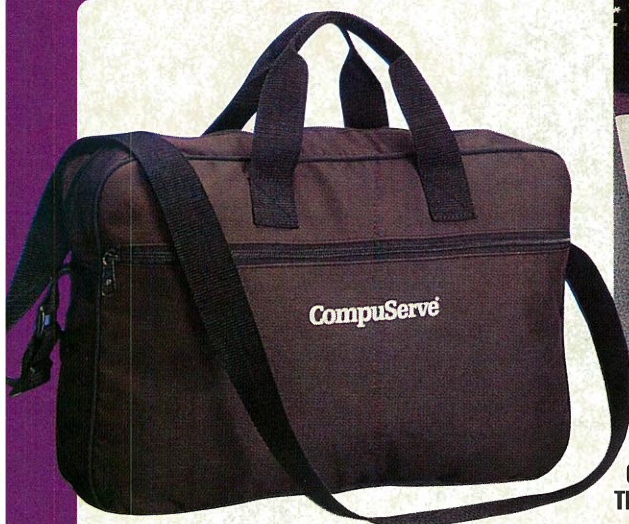


ULYSSES BLACK'S REFERENCE GUIDES FOR TELEPHONE AND DATA NETWORKS

The V Series Recommendations: Protocols for Data Communications over the Telephone Network offers practical coverage of hard-to-read CCITT communications standards and protocols. This comprehensive guide provides a tutorial and reference for datacommunications professionals involved in implementing these standards into their systems.

The X Series Recommendations: Protocols for Data Networks is a quick-reference guide and tutorial covering the CCITT X Series recommendations. This handbook breaks down the detailed definitions and descriptions of the X Series recommendations into an easily understood format.

MCSRAW-HILL BOOKS. GO MH
V SERIES RECOMMENDATIONS \$34.95
X SERIES RECOMMENDATIONS \$39.95



GET A FREE WALL CHART.

The CompuServe Store's annual sale is underway! Be one of the first 2,500 shoppers to make a purchase beginning Feb. 1 and you will receive a **free** CompuServe wall chart. Sale-priced online is a wide array of CompuServe items, including CompuServe Information Manager for the IBM PC or Macintosh, the all-new *Complete Guide to CompuServe*, the revised *Financial Services Users Guide* and a CompuServe logo briefcase.

COMPUVERSE STORE. GO ORDER WALL CHART FREE WITH PURCHASE



GET A FREE SOLAR CALCULATOR AT TRW CREDENTIALS.

Enroll in TRW Credentials' service online and receive a **free** solar calculator with your paid membership. This sleek credit card size calculator looks like your credentials membership card, and it never needs batteries! TRW Credentials service, a unique information service created by TRW, operator of the nation's leading credit reporting bureau, helps you maintain vigilance over your credit status for only \$39 a year. Complete details online.

TRW CREDENTIALS. GO CRE

GET A STATE-OF-THE-ART MODEM AND FAX COMBO WITH THE NEW MAXLITE.

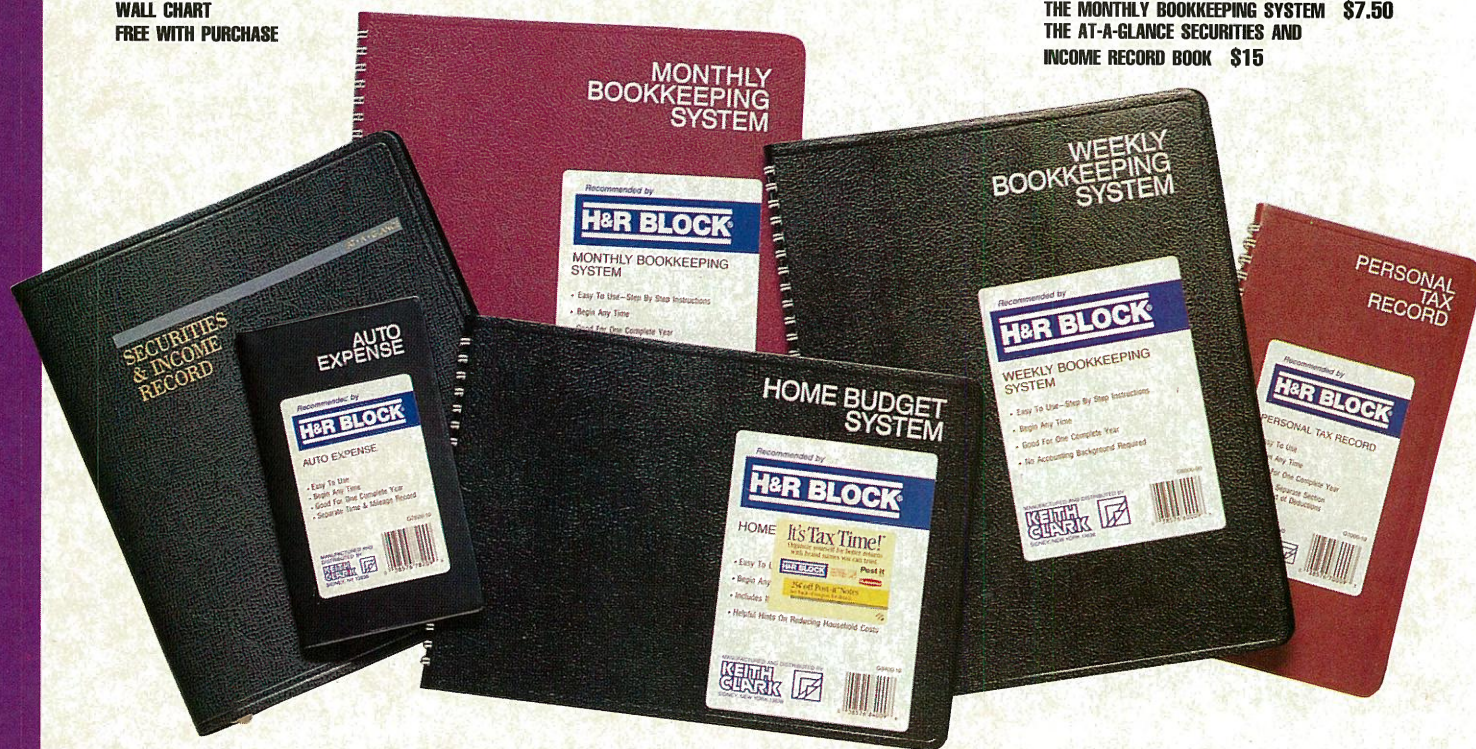
The new MaxLite from Macronix Inc. is a 9600-baud fax/2400-baud modem with MNP five error-checking and virus checking. Its unique features include Windows support, WYPIWYF support and true portability. The MaxLite also features multiple phone directories, broadcast, delayed send, automatic cover letter and more. Optional software for Macintosh compatibility. Complete specifications online.

FROM MISSION CONTROL SOFTWARE. GO MCS MAXLITE MODEM \$249

SAVE 25% ON H&R BLOCK PRODUCTS AT PENNY*WISE OFFICE PRODUCTS.

Prepare now for next April 15 with record keeping books from H&R Block. Featured online at Penny*Wise Office products is a selection of H&R Block's most popular expense and record keeping books, all at 25% off!

FROM PENNY*WISE OFFICE PRODUCTS. GO PW
THE WEEKLY BOOKKEEPING SYSTEM \$7.50
THE PERSONAL TAX RECORD \$3.37
THE AUTO EXPENSE BOOK \$1.80
THE HOME BUDGET SYSTEM \$2.97
THE MONTHLY BOOKKEEPING SYSTEM \$7.50
THE AT-A-GLANCE SECURITIES AND INCOME RECORD BOOK \$15





EXPLORE TAX-FREE OPPORTUNITIES AT DREYFUS.

Under tax reform, tax-exempt bonds are among the few remaining sources of tax-free income available to Americans. Dreyfus offers a family of funds that are exempt from federal taxes. Investors enjoy the advantages of low minimum investment, no sales load to invest and no penalties to redeem and **free** unlimited check-writing in amounts of \$500 or more. Plus, you also have the freedom to exchange fund shares, at no cost, for shares of other Dreyfus no-load funds, including stock, bond and money market funds. CompuServe members are invited to request **free** prospectuses online.

DREYFUS. GO DR

FORD TEMPO: A CAR YOU CAN COUNT ON.

Sound design and proven engineering principles make Tempo a car you can count on. Comfortable interiors, fuel efficient engines and available air bag provide transportation value that's hard to match. But there's a new twist to the '92 Tempo. It's the Tempo GLS with V-6 power! Find out more about this exciting sports sedan in the Ford Electronic Showroom.

FORD MOTOR CO. GO FORD



SAVE \$10 ON COMPUERVE INFORMATION MANAGER

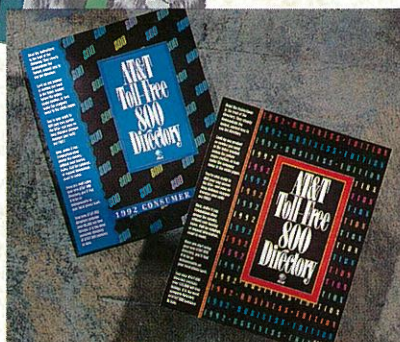
CompuServe Information Manager software kits for members, normally \$25 with \$25 usage credit, are now sale priced at only \$15 with a \$15 usage credit. CompuServe Information Manager features a windowed interface with pull-down menus and dialog boxes freeing you from having to memorize commands. If you haven't yet made the switch, now's the time!

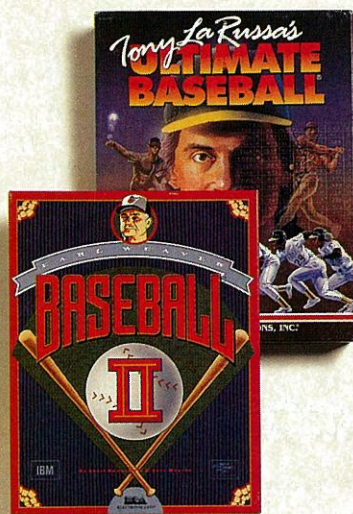
**FROM COMPUERVE STORE. GO ORDER
COMPUERVE INFORMATION MANAGER \$15**

FIND FINANCIAL SERVICES WITH THE AT&T 800 TOLL-FREE DIRECTORY.

Toll-free numbers allow you to select banks, investment counselors and brokers nationwide to get the most mileage from your money. Visit the AT&T 800 Toll-Free directory for thousands of toll-free listings coast-to-coast including banks, credit card companies, credit unions and investment services. Whether applying for a new credit card or searching out a new mutual fund, the AT&T Toll-Free Directory puts the information you need at your fingertips. To get more for your money, GO ATT.

AT&T TOLL-FREE DIRECTORY. GO ATT





PLAY BALL AT THE MALL IN THE GRAND SLAM CONTEST.

Enter The Electronic Mall's *Grand Slam* contest and you could win a trip for two to the baseball game of your choice, compliments of CompuServe. Over 100 other exciting prizes, too, such as many software packages available from Computer Express. For complete rules and your chance to win, GO MALL.

FIND A SUMMER JOB WITH PETERSON'S.

Attention students! Find a summer job in the U.S. or overseas with these special guides from Peterson's. Each guide includes valuable information covering everything from visas and work permits required for jobs overseas to details on desired qualifications, compensation and contact names for positions back home. From archaeological digs in France to teaching English in Spain, from working on the marina staff at a Florida resort to interning at a top Washington, D.C. government agency, these guides can open the door!

FROM PETERSON'S CONNEXION. GO PX
INTERNSHIPS 1992 \$27.95
SUMMER EMPLOYMENT DIRECTORY OF THE UNITED STATES 1992 \$15.95
1992 DIRECTORY OF OVERSEAS SUMMER JOBS \$14.95
SUMMER JOBS BRITAIN 1992 \$13.95
THE INTERNATIONAL DIRECTORY OF VOLUNTARY WORK \$13.95



GET THE JUMP ON UNCLE SAM AT COMPUTER EXPRESS' TAX CENTER.

Now is the time to order tax-time software for your IBM or Macintosh. Visit Computer Express' all new Tax-Time Center for savings on all the latest tax-related software. Featured programs include *TurboTax 1040* (Windows or DOS), *TurboTax ProSeries*, *Shortform*, *Taxview Pro*, *Macintax*, *TaxCut* (Windows or DOS), *TaxCut EZ/A*, *J.K. Lasser's Your Income Tax* and many more. Individual state packages are available, too. Of course all titles are offered at Computer Express' everyday low discount prices.

If you are unsure which program best meets your needs, Computer Express' expert staff will be glad to assist you in selecting the best program for you.

FROM COMPUTER EXPRESS. GO CE



DISCOVER THE 1992 BUICK SKYLARK.

Buick's completely redesigned 1992 Skylark coupes and sedans feature dynamic new styling, a high-tech and fuel-efficient base engine and anti-lock brakes as standard equipment. Skylark has a standard 2.3-liter Quad OHC engine. The single overhead cam four-cylinder engine, with eight valves and multi-port fuel injection, has more horsepower, more torque, better fuel economy and more responsiveness than the 2.5-liter engine it replaces. Plus it

delivers 120 horsepower at 5200 rpm and 140 lb-ft of torque at 3200 rpm and has an EPA fuel-economy rating of 23 (city) miles per gallon and 31 on the highway. Available in four exciting new exterior colors: Neon Blue Metallic, Bright Red, Aquamarine Metallic and Bright White. Request a free brochure online.

BUICK. GO BU

**SAVE \$13 ON
SOFTMATE
PROFESSIONAL
CONTACT LENS
CLEANING KIT.**

Attention contact lens wearers! In addition to offering replacement lenses at up to 65% savings, Contact Lens Supply also carries a selection of disinfecting and cleaning kits, also at low discount prices. Package L, pictured here, features a nifty ultrasonic lens cleaner that plugs into any wall unit, 6-ounce aerosol Softmate saline spray and Hydro-Mat II lens washer.

CONTACT LENS SUPPLY. GO CL
LIST PRICE \$35
SALE PRICE \$22

**GET MORE THAN 60 SOFTWARE
PROGRAMS FOR WHAT SOME COMPANIES
CHARGE FOR ONE!**

Subscribe online to On Disk Monthly for the PC, Diskworld for the Macintosh, Softdisk for the Apple II or Loadstar for the Commodore 64, and you will receive five to seven new programs every month. Each issue includes a variety of new software your whole family will enjoy, including entertainment, education and productivity programs and utilities. During the course of a year, you will receive more than 60 programs in all, for less than you would pay at retail for a single quality program! Subscribe today risk-free. Complete details online.

SOFTDISK PUBLISHING. GO SP



PIONEER 18-DISC CD PLAYER

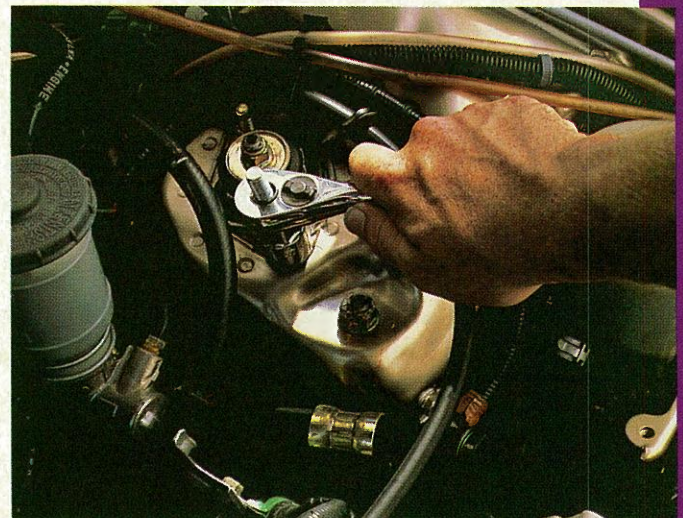
This Pioneer CD player holds 18 compact discs with three six-disc magazines. Other features include full-function wireless remote, seven-mode repeat and digital level control. Model #PDTM1. Delivery included in sale price.

DISCOUNT SHOPPING INC. GO DSI
PIONEER CD PLAYER \$329

**SAVE ON SEARS' EXCLUSIVE
O-RATCHET WRENCH SET.**

The patented, Pass-Thru Hexx Drive(tm) design allows long bolts to pass right through the ratchet head. A Sears Exclusive, this handy device does the job of deep sockets or box-end wrenches without switching tools! Set includes a 3/8-in. drive wrench and eight O-Sockets in standard or metric sizes.

SEARS. GO SEARS
SALE PRICE \$37.99



**SAVE \$60 ON WEBSTER'S NEW
UNIVERSAL UNABRIDGED DICTIONARY.**

Get a big deal on a big dictionary! 2,300 pages long, this quality dictionary includes over 32,000 definitions, 3,000 illustrations and 16 pages of maps in full color! Thumb-indexed for quick reference, the dictionary provides definitions of virtually any word or phrase you might need for school, business or your everyday activities. All for about 16¢ definitions per penny!

FROM BARNES & NOBLE. GO BN
PUBLISHED AT: \$79.95
SALE PRICE \$19.95

GET THREE BOOKS FOR \$3 (UP TO \$99 IN VALUE) AT THE SMALL COMPUTER BOOK CLUB.

The Small Computer Book Club, one of the Newbridge Book Clubs, puts more than 200 of the best, most current books for professional users and programmers of business computers at your fingertips. CompuServe members are invited to take three outstanding, hot-off-the-press computer books for just \$1 per book and enroll in the largest and best book club for serious computer users and programmers. The only commitment is to buy three more books, at significant member discounts, in the next two years.

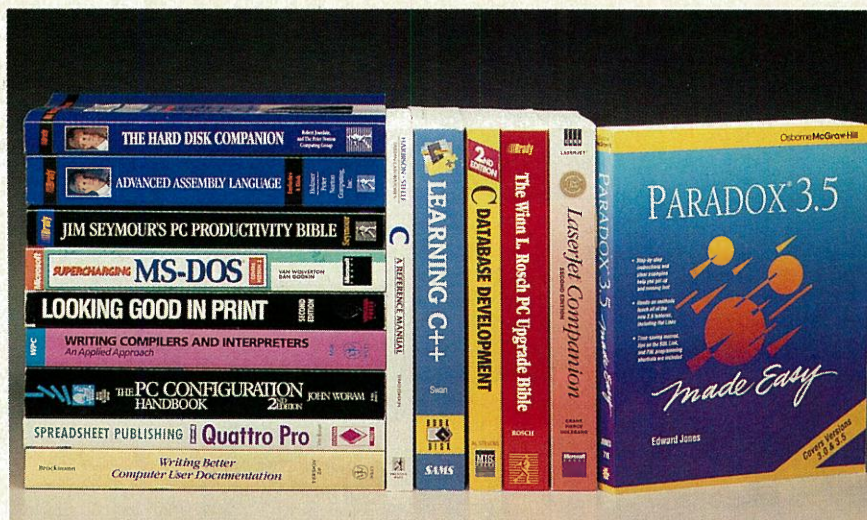
Many exclusive titles, not available through any other book club, are featured online. These include *The PC Configuration Handbook 2E* by CompuServe member John Woram, *The Hard Disk Companion 2E* by Peter Norton and Robert Jourdain, *Learning C++* by Tom Swann, *Windows 3 Power Tools* by The LeBlond Group, *C: A Reference Manual* by Harbison and Steele and *SuperCharging MS-DOS 4E* by Van Wolverton and Dan Gookin. All the best computer book publishers—Bantam, Brady/Prentice Hall, Howard Sams & Co., Microsoft Press, Osborne/McGraw Hill, Que Corp., Peachpit Press, Ventana Press and others—are represented in the Small Computer Book Club.

SMALL COMPUTER BOOK CLUB. GO BK
THREE COMPUTER BOOKS \$3

REQUEST FREE CATALOGS AND INFORMATION AT THE CATALOG STORE.

J.C. Whitney, J. Crew Clothing, Burger's Smokehouse, King-Size Clothing, The Popcorn Connection. Now you can request free catalogs from these and other leading cataloguers online at The Catalog Store. New catalogs are added frequently, too, so you will want to check back often. A number of companies also offer free information about their products or services. No-obligation brochures include *50 New Investment Opportunities*, *Coins and Stamps at Dealer Prices*, *Clothing for Big and Tall Men* and *College Financial Aid*. For personal-computer enthusiasts, there is a wide array of specialty brochures, including *Exotic-Specialty Laser Printer Paper*, *Color DTPresentation Equipment*, *Graphic Software for IBM PC/AT* and *Hard-to-Find Computer Accessories*.

THE CATALOG STORE. GO CA



JOIN FOUR KIDS' BOOK CLUBS ONLINE RISK-FREE.

Make learning fun and easy for your child by joining any of Golden Press' four book clubs, designed especially for kids. Enjoy big savings and receive free gifts with your membership.

Get five valuable books for only \$4.49 when you join the Sesame Street Book Club. Upon approval, get two sets of flashcards free, too. Examine the introductory books on 14-day approval. If you wish to keep the books, pay only \$4.49 plus shipping, handling and applicable sales tax. Then, your child will receive two more new books for only \$4.49 each month. There is no obligation to buy a single book ever and your child's membership may be canceled at any time. Sesame Street Fans can join the Sesame Street Big Bird Beep Books Club online, too.

For older kids, there is the Golden Book Encyclopedia, an exciting educational series that enables your child to seek out answers with or without help on a wide variety of subjects. Volume 1 from the series is yours free for agreeing to preview Volume 2 risk-free for 14 days. If you like the series, purchase Volume 2 for \$4.99 plus shipping, handling and applicable sales tax. Also join the Girl Talk Fun Club, a great new series designed for the junior high set, online. Receive a book light, Go Anywhere(tm) stickers, a wall poster and the Back Talk Newsletter—all free with your membership.

In addition to its various book clubs, Golden Press also offers a selection of one-shot specials online. Especially recommended is Bag of Books, a charming collection of 10 storybooks. The \$34-value assortment is yours for only \$12.95!

GOLDEN PRESS BOOK CLUB. GO GP

OMAHA STEAKS DELIVERS TO YOUR DOOR

For 75 years, Omaha Steaks International® has been serving the world from the heart of beef country. Only the finest, corn-fed, aged (for maximum tenderness) beef is selected. Before your steaks are shipped from Omaha to your door, they pass a vigorous seven-point quality inspection. Your satisfaction is always unconditionally guaranteed.

For holiday gifts, gourmet food packages are unique and impressive. Consider the Special Introductory Offer—order six 5-ounce filet mignons (regularly \$51.95), the most tender steaks of all, for only \$29.95 plus \$6.50 shipping and handling. That's a \$22 savings!

In addition, a number of year-round gift programs and gourmet gift certificates also are showcased online. But beef is just the beginning. Omaha Steaks also offers a variety of high-quality veal, pork, lamb, seafood, poultry, hors d'oeuvres, desert items and hard-to-find food delicacies. Tempt your taste buds with everything from Chateaubriand to black forest cheesecake and gourmet lobster tails to gourmet franks. Shoppers are invited to request a free copy of the Omaha Steaks gourmet catalog, 36 pages of mouth-watering delights. Also receive a free copy of Omaha Steaks *Good Life Guide and Cookbook* with every order you place. It features great recipes, serving and storing tips and a fool-proof steak cooking chart.

Omaha Steaks International has been serving the world from the Midwest for 75 years and is looking forward to serving you.

OMAHA STEAKS. GO OS

by Pat Soberanis

Of Mice and Trends

► Logitech says what's next for the handy point-and-click marvel.

Deceptively simple in appearance, computer mice are complex products of mechanical, electrical and software engineering. In fact, there's a microprocessor "brain" inside the mouse, according to Shoaib Saleem, product support manager for Logitech, the world's largest and fastest growing producer of computer mice.

Since the Fremont, Calif.-based company started manufacturing mice for Wang, AT&T, DEC and other hardware firms a decade ago, it has sold 10 million of them in all shapes and sizes—ranging from the early box-like variety to diverse specialty models for laptop computerists, left-handers, novice computer users and even children.

The endless varieties do not surprise Doug Engelbart, who first developed the mouse with his Stanford Research Institute colleagues in 1965. What surprises him is how long it has taken people to warm up to the device, a delay he chalks up to the natural human resistance to change.

Few of us would recognize Engelbart's original mouse, with its wooden housing and tiny, pop-up button in the corner. Someone envisioned a mouse in its wire "tail" and button "nose," and the name stuck. Engelbart, whose credits include such mainstream technologies as electronic mail, mixed text-graphics files, multiple windows and shared-screen teleconferencing, developed the mouse as a screen-selection device—one more way for users to interact with their computers.

The driving force behind the growth in mouse use has been the proliferation of graphical user interfaces, such as Microsoft Windows and desktop publishing, graphics and computer-aided design software.

First adopted by

engineers and graphic designers, mice have been around for several years. And although Mac users have had the devices on their desktops for nearly 10 years, IBM PC users had to wait for the speedy 286- and 386-based systems that could handle complex graphics programs.

"We used to have to ship our mice with software that would utilize the mouse," says Scot Schulte, Logitech's product line manager of pointing devices, "because mouse-based applications weren't widely available."

The technology inside the mouse has come a long way since Engelbart's wooden model, which used two wheels placed at right angles to track cursor movements. Its descendants rely on either wheels, mechanical rollers placed at right angles, optical signals requiring a reflective-grid mouse pad, or optomechanical methods. Logitech considers optomechanical technology state-of-the-art, since it combines the reliability, flexibility and longevity of mechanical rollers with the precision of optical signals.

Ideas for new mice come from anywhere: trade shows, user groups, seminars, bulletin boards, even small start-up companies. Logitech engineers, product managers, marketers and support staff watch for new concepts. Then the idea needs a champion within the company, "someone who feels strongly about a product," says Schulte. The product has to have a soul, some emotional basis that gets people excited." From hallway discussions, a champion can guide the concept through the feasibility, proposal and authorization stages.

While part of Logitech's product strategy is to follow computer industry developments,

COMPUTING SERVICES

the company also anticipates trends. Logitech has high hopes for its new 3-D mouse for researchers and engineers. The technology, based on ultrasonics, is similar to that used for the special effects in *Terminator 2*; it's called virtual reality.

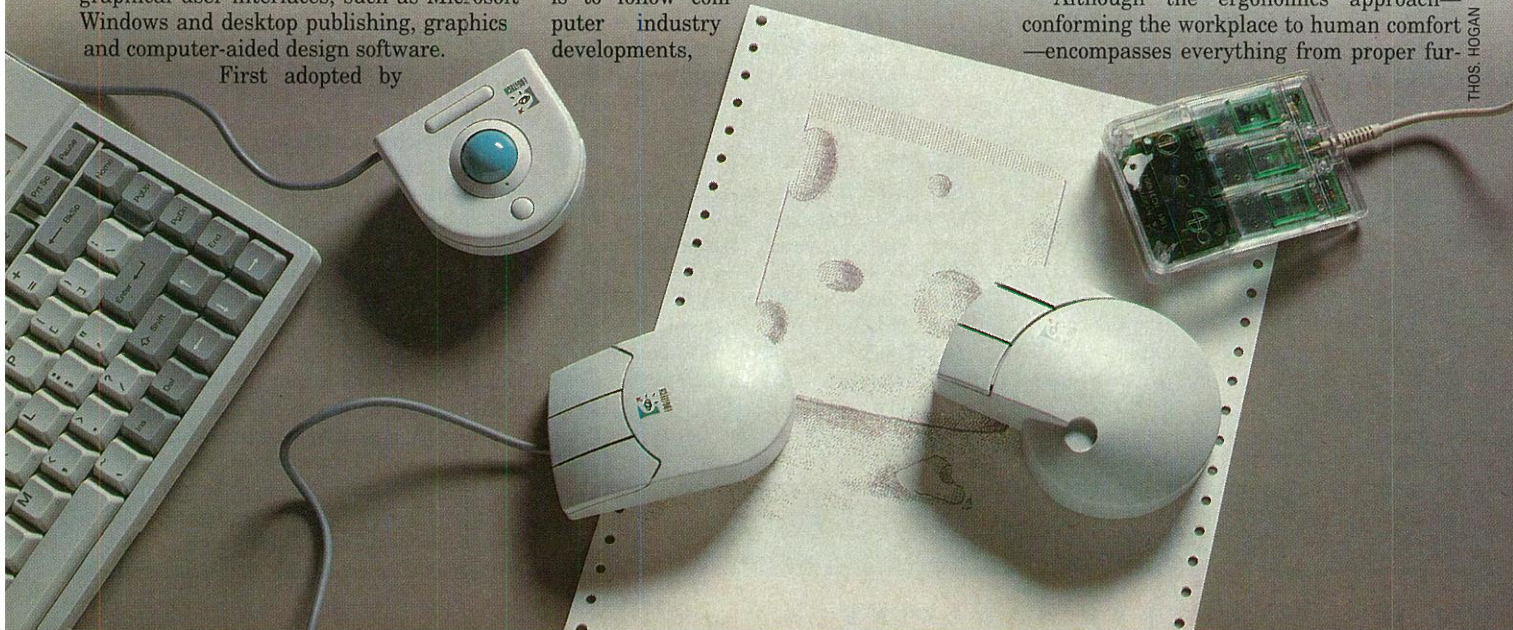
For example, an engineer at a workstation can rotate the mouse and see a corresponding rotation in the object he's viewing on the computer screen.

In recent years, design has become as important as technology in driving the mouse industry. Outside designers, in fact, often contribute new concepts of their own. In fulfilling a Logitech request to design its Trackman stationary mouse, industrial design firm *frogdesign* recommended using the thumb instead of the index finger or palm to operate the trackball mouse, which became the market leader. But it could be used only by right-handed users, causing the company to rethink its other mouse designs. Schulte says the trend now is market segmentation—different kinds of mice designed for different types of users.

Out of this concept came the ergonomically correct mouse, championed by company co-founder and visionary Pierluigi Zappacosta. Working closely with *frogdesign*, Logitech set out to create a comfortable mouse and sought additional input from managers, designers and other professionals, including a hand surgeon at Stanford University. Biomechanics Corp. of America was consulted for feedback on performance, and novice and expert beta-testers further evaluated it. The entire process, from concept to market, spanned a year.

Although the ergonomics approach—conforming the workplace to human comfort—encompasses everything from proper fur-

THOS HOGAN



Picture Perfect: Scanners and OCR Technology

When Logitech introduced its ScanMan hand-held scanner in 1988, customers and the press saw it as a gadget or toy. Now that its new family of gray-scale ScanMans has won coveted awards from the likes of *PC/Computing*, *Byte* and *InfoWorld* magazines, no one calls them toys anymore.

Gray-scale scanners capture the shadows as well as lines in a black-and-white drawing or photograph. All three Logitech models come with image-editing software, which can retouch images and "stitch" pieces of a page together on the screen. Model 256 (Windows platforms only), designed for the professional publishing market, ensures straight scans and produces magazine-quality half-tone photographs; Model 32 (for DOS or Macintosh) is aimed at the general office and home markets.

For graphic images, a scanner is all that is needed. People often scan logos for use on letterheads, or photos to spice up newsletters.

For text, however, users require optical character recognition



A toy no more: ScanMan

(OCR) software to make use of scanned text or data. The hardware side of OCR is not difficult, says Michael Doyle, Logitech technical support manager. "It's just one bit per pixel; the dot is black or white. After that, the OCR software figures out what those characters are."

Logitech's CatchWord OCR software translates scanned text and data for popular word processing, database and other DOS-based applications. And the Logitech Forum (GO LOGITECH) provides support. As with mice, the most common questions do not concern usage but installation and interrupt conflicts. Logitech scanner owners can download the ScanMan Family Diagnostics file (2000.TXT) from Library 3, "ScanMan Family."

Doyle believes future generations of scanners will be even more portable than the hand-held ScanMan. He foresees color scanners, and believes developers will perfect OCR software—perhaps to the level of handwriting recognition—and provide "intelligent" software to allow more manipulation of the image once it is scanned in.

niture and lighting to display-screen height, ergonomic mice also can reduce repetitive strain injuries, such as carpal

tunnel syndrome. Logitech's MouseMan, for example, features elongated buttons, tapered tops and rounded edges to better fit the natural, angular resting position of the hand, and thus transfer the stress from the wrist to the stronger muscles of the upper arm. The company created a version for left-handed DOS users; depending on demand, it hopes to accommodate Mac left-handers as well.

All but the Kidz Mouse, a new mouse

COMPUTING SERVICES

designed for children, operate on Logitech's programmable three-button philosophy, which Engelbart endorses. "We even-

gelize a lot with software developers on the benefits of programming to the three-button mouse," says Betty Skov, Logitech public relations manager. But Logitech mouse owners needn't wait for developers; for those with DOS applications without mouse support, the Logitech Forum (GO LOGITECH) supplies "menus" with which to code mouse buttons (Library 1, "Mouse Products," file MENUSEX).

The most common request for help Logitech gets from customers, surprisingly, is not about gummed-up balls—Logitech designs its mice to be self-cleaning—but rather installation. The mouse needs a dedicated interrupt request, or IRQ, tied to a COM port on the computer. Depending on your hardware and whether you have TSRs—terminate and stay resident software—your mouse may work with some applications, yet freeze up with others. Or you may not be able to install it at all. The Standard Diagnostics file (1000.TXT in Library 1), allows you to solve these problems—or the technical support staff will walk you through the process when you leave a message in the forum.

Saleem, who serves as forum manager, sees CompuServe as a key component of Logitech's customer support, which also includes a 24-hour bulletin board and an innovation called FaxBack in which a company computer automatically faxes technical-support information requested via Touch Tone telephone.

With such automated support already developed, Logitech was able to offer practical files to its CompuServe members as soon as the forum opened—and during the forum's first month of operation, 750 CompuServe members accessed those files. Among the most popular are Logitech mouse drivers and information about them, help in adapting Logitech mice to DOS 5.0, and Standard Diagnostics for the mouse and scanners. (For a list of popular files, see box at left.)

Ideas that arise from forum members will play a role in Logitech's design of future generations of mice. "We hope to incorporate their opinions, criticisms and praises into future products," says Schulte. ◀

Pat Soberanis is a free-lance writer based in San Francisco.

Mouse Monitions: Logitech Forum Files

Here's a sampling of popular files from the Logitech Forum (GO LOGITECH) libraries:

LIBRARY 1, "MOUSE PRODUCTS"

Mice and DOS—News about using Logitech mice with DOS 5.0. File 1500.TXT.

Information about RMAs—Upgrades/updates, replacement disks and order-status policies from Logitech's customer service department. 6500.TXT.

Drivers—Latest Mouse Drivers, including README file. DRV60.EXE.

Key Codes—Menus for coding key combinations to Logitech mouse buttons for DOS applications that do not support mice. MENUSEX.

Logitech Driver—News on the latest Logitech driver. README.MW6.

Self-help—Standard diagnostics for pinpointing mouse problems, using the same steps Logitech technicians use. 1000.TXT.

Configuration Guidelines—For using Logitech mice with Windows 3.0. 1001.TXT.

OS/2 Driver—How to use OS/2-provided driver to configure any Logitech mouse to run under OS/2. 1002.TXT.

LIBRARY 3, "SCANMAN FAMILY"

Self-help Diagnostics—Pinpoint ScanMan hand-held scanner problems, using the same steps Logitech technicians use. 2000.TXT.

Latest ScanMan Drivers—Includes README file. HHSCAN.ZIP.

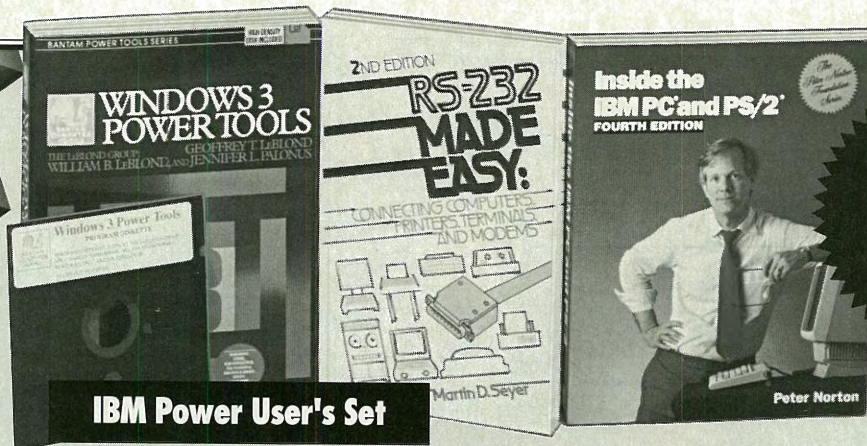
GrayTouch Image Editing—Information for ScanMan, ScanMan Plus and ScanMan-32 hand-held scanners. GRAY.TXT.

Common Questions and Answers—On printing, exporting images and other tips about Ansel software for hand-held scanners. 2400.TXT.

Take the IBM POWER USER'S SET for only \$4.95

as your introduction to the Small Computer Book Club

You simply agree to buy three more books — at significant savings — within the next 2 years.



IBM Power User's Set

Use the convenient coupon below to order the 3-volume IBM POWER USER'S SET, a \$114.90 value, for only \$4.95. Or, if you prefer, go online to choose 3 books for only \$1.00 each (with values up to \$90.00) from a selection of over 200 book and software options. Whatever your choice, you'll find these books to be welcome additions to your library.

Windows 3 Power Tools

by The LeBlond Group

Manipulate Windows for high performance. The accompanying 5 1/4" high-density disk features *Oriel*, *Aporia*, *IconDraw*, and more. Publisher's Price: \$49.95

RS-232 Made Easy

Connecting Computers, Printers, Terminals and Modems
Second Edition

by Martin D. Seyer

Easily link printers, computers, modems, and terminals. Includes the operation of RS-232 on a private line, synchronous signals and flow control, cross connections, interfacing equipment, and more.

Publisher's Price: \$40.00

Inside The IBM PC and PS/2, Fourth Edition

by Peter Norton

Includes the new 80486 chip, BIOS operation, and optimization techniques. Updated to incorporate the latest iterations on the old PC model and DOS 5.

Publisher's price: \$24.95

MEMBERSHIP BENEFITS • In addition to getting The IBM POWER USER'S SET for only \$4.95 when you join, you'll also receive discounts on books you choose to purchase. Discounts generally range from 15% to 30% off the publishers' prices, and occasionally even more. • Also, you will immediately become eligible to participate in our Bonus Book Plan, with savings of more than 50% off the publishers' prices. • At 3-4 week intervals (15 times per year), you will receive the Small Computer Book Club News, describing the coming Main Selection and Alternate Selections, together with a dated reply card. • In addition, up to three times a year, you may receive offers of Special Selections which will be made available to a group of select members. • If you want the Main Selection, do nothing, and it will be sent to you automatically. • If you prefer another selection, or no book at all, simply indicate your choice on the card and return it by the date specified. • You will have at least 10 days to decide. If, because of late mail delivery of the News, you should receive a book you do not want, we guarantee return postage.

©Newbridge Communications, Inc.

Get On Line – GO BK9

to choose 3 books for \$1 each
(With values to \$90.00)

When you join the Small Computer Book Club

If the IBM Power User's Set isn't for you, GO BK9 and view our regularly updated listing of more than 200 current, top-selling computer books from the best publishers: Que, Microsoft, Sams, Osborne, Brady, and Bantam, to name just a few.

And now, for just \$3.00, you can choose from over 200 book and software options with values of up to \$90.00!

GO BK9 to browse our on line store of over 200 items on the Electronic Mall. Spend as much time as you need...you've got Free Connect in the Electronic Mall!

— GO BK9 Today! —

SMALL COMPUTER BOOK CLUB

A Newbridge Book Club
3000 Cindel Drive
Delran, NJ 08370-0001

Please accept my application for trial membership and send me The IBM POWER USER'S SET (00150) billing me only \$4.95, plus shipping and handling. I agree to purchase at least three additional Selections or Alternates over the next 2 years. Savings generally range from 15% to 30% off the publishers' prices. My membership is cancelable any time after I buy these three additional books. A shipping and handling charge is added to all shipments.

No-Risk Guarantee: If I am not satisfied — for any reason — I may return The IBM POWER USER'S SET within 10 days. My membership will be canceled, and I will owe nothing.

Name _____

Address _____ Apt. _____

City _____

State _____ Zip _____

(Books purchased for professional purposes may be a tax-deductible expense. Offer good in Continental U.S. and Canada only. Prices slightly higher in Canada.)

CompuServe Magazine 2/92

Y-DS5



There's No Accounting for It

MONEY MATTERS

CM's Money Matters Credo:

To the casual and serious investor alike, we vow to provide sanity when the bulls and bears run wild; indeed to explain and inform. Where money matters, we'll provide the means of attaining discretion and thus the better part of financial valor.

▼
What to Do When Your Return 'Returns'

▼
Tax Prep Programs, p. 34

▼
Home Office: One Big Gray Area, p. 37

Survivors of IRS audits explain what to expect and how to make the dreaded process less taxing.

Since the Internal Revenue Service audits fewer than one in 100 tax returns, most people figure their number will never come up. And they're probably right. But self-employed individuals stand a greater chance of winning the IRS audit lottery, facing a one in 50 chance of appearing before Uncle Sam. The reason? A number of deductions to which the self-employed are rightfully entitled, such as home office and business travel expenses, have a tendency to be abused and can set off alarms in the IRS computers.

Should that audit notice arrive in the mail, don't panic. "The audit doesn't have to be a bad experience," insists K. Barry Morgan, a certified public accountant, who along with other CPAs often informally offers tax and audit advice in the Working From Home Forum's (GO WORK) Section 9, "Accounting/Tax."

In fact, accounting firm Ernst & Young reports that in about 30 percent of all audits, the IRS makes no changes or issues a refund. "No one likes an audit, but it's not the terrible thing people think it is,"

says Henry Holmes, an IRS spokesman based in Washington, D.C. "If you go to an examination with the same records you used to create the tax return, you shouldn't have a problem. But if you fudged or took some liberties, there might be room for concern."

If you do receive an audit notice, your first step is to discern why the IRS is auditing you; that is, make sure you understand which part of your tax return is being questioned. The IRS audits returns for correctness of income, exemptions, credits and deductions.

"Review the return under examination to see if there are any obvious problems," says Morgan. "Don't look at just the items on the list provided by the IRS. If there are other problems, decide in advance how to deal with them." Also, don't be surprised if the IRS requests tax returns for the years preceding and following the one being examined.

Philip W.*, a member of the Scuba Forum, was recently audited for tax years 1988 and 1989. The IRS questioned alimony payments, all of his self-employed business expenses as an insurance salesman, high mortgage interest and unreported income.

** The CompuServe members interviewed for this article agreed to participate on the condition that their identities not be revealed.*

Files for the Self-Employed

The Working From Home Forum's (GO WORK) Library 9, "Accounting & Tax," contains a number of files that will help you figure your taxes, track down your deductions and stay afloat if the IRS comes calling.

Take the Sting Out of Self-employment Tax—Examines strategies and offers tips on keeping more of what you earn. SETAX.THD.

Kids as a Business Deduction?—Covers the proper approach to handling taxes and withholding when you employ your children in your home-based business. WTHKID.THD.

Start-up Expenses—How do you handle initial equipment purchases? Answers are in this message thread. STRTUP.THD.

Purchasing Capital Equipment—Discussions of the tax ramifications of buying office equipment. BUYCAP.THD.

Keeping Books—Do you have a formal set of "books" for your business? Is it legal to keep your records in a loose-leaf binder or on a computer? Find out in this message thread. BOOKS.THD.

"The auditor reviewed each item in detail that had been scheduled to be examined," he says. "In addition, he wanted me to justify my business expenses."

Although Philip ended up owing some \$2,600 in back taxes for unreported income that he says was an honest mistake (no penalties were assessed), Philip's audit went smoothly because he had complete documentation for all expenses. "Be prepared to inundate the IRS with paperwork," he says.

Don David, an enrolled agent who represents individuals at IRS audits, agrees. "Find documentation to support each item being audited," he says. Of course, that documentation should be in order already, since bookkeeping is a basic task for any business.

A Working From Home Forum member who dispenses such advice online, David says financial books must be orderly and conform to standard accounting rules. Use double-entry accounting to show sources of funds, document loans, asset purchases, business losses, thefts and all expenses with more than just numbers. "Show who, where and why, in addition to how much," says David. If you don't have the time or the expertise to do this yourself, hire someone who does, he recommends.

Morgan advises the self-employed to maintain a separate bank account for the business, and deposit all cash into that account so there will be a record of it. Pay all of your expenses from this business account, and don't pay personal bills from it. If you keep your business records on a computer, make sure you back it up regularly.

Jeff K., a free-lance magazine and book writer who frequents the Amiga Forum, learned the hard way that his bookkeeping wasn't up to snuff. Living in a cramped one-room apartment, Jeff figured he didn't have the space to keep receipts and other records, so he threw them out. He freely admits, "I'm very bad at saving things." Since he had no documentation when he appeared for his audit, the IRS gave him six additional



weeks to recreate it, which he did using copies of checks supplied by his bank and copies of his credit card receipts supplied by VISA. In hindsight he says, "I'll be more careful with my recordkeeping from now on."

If you have lost your documentation, you'll need to reconstruct records before attending the audit. "Be reasonable when doing this. Reconstruction is *not* the same as 'making up' records. For example, if you have lost your automobile log, use your appointment book to reconstruct it," David says.

IBM Applications Forum member Bruce P. became an expert in documentation reconstruction. In the early 1980s he was working as a traveling salesman, covering a three-state territory. It was his responsibility to personally pay for all of his travel expenses, including fuel, car maintenance, hotel and restaurant bills, resulting in business expense deductions that were extremely high in comparison to his income. Bruce didn't realize how important it was to keep accurate, organized records and to *save* them. Tired of moving the cardboard boxes full of his receipts, he threw them out, and just one week later, he received an audit notice.

"I couldn't believe it! What was I going to do? I knew the IRS would never believe I had *just* thrown the stuff away. The coincidence was almost laughable, but it was also scary," he says.

Working with his IRS auditor, Bruce reconstructed his records, which included getting a letter from his former employer stating that he was responsible for those expenses, researching average prices for meals and hotels in the places he stayed and counting up his mileage on the route he always followed. The IRS was actually generous in that it accepted half the amount of the deductions. Considering Bruce had no real documentation, the agency didn't have to accept anything. The tax bill came to about \$4,000.

The questions you'll be asked during an audit are designed to prove to the IRS that the deduction or item in question on your tax return is legitimate.

Common queries for the self-employed concern 1099 forms, home office deductions and travel and business expenses. It's likely that at the beginning of the interview, the auditor will ask about your business. This information helps the auditor better understand why you think you're entitled to certain deductions.

Jim B., a free-lance sound and recording engineer and MIDI/Music Forum member, says his auditor began the interview by asking detailed questions about his work. "This was my opportunity to explain my job in such

Job Hunting? GO PX and Get Results.

Every day, top companies search Connexion's recruitment network for people they want to hire. You could be one of these people. Join Connexion today and link up with opportunities in:

- Technical and non-technical fields
- Small and large companies in all parts of the country
- Entry level to upper management positions

Companies that want to tap Connexion's large and growing pool of qualified people should call 1-800-338-3282 today.

**GO PX and enter
Connexion today.**

Questions?
Call 1-800-338-3282.

connexion®

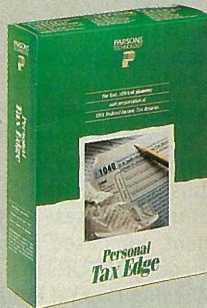
The Innovative Recruitment Service
from Peterson's Dept. 1489

GO OLI for more information.

Prepare Yourself: Tax Programs

Once you add Schedule C, "Profit or Loss From Business (Sole Proprietorship)," to your income tax package, figuring your taxes will never be the relatively simple job it once was. However, a tax preparation program can help.

Personal Tax Edge from Parsons Technology includes an online interview to help you organize your tax information. Features include a "what if" tax estimator to compare different filing alternatives and a bookkeeper that lets you detail tax receipts and supporting figures for each line item. Data from MoneyCounts, Managing Your Money or Quicken can be imported easily. Designed for the IBM and compatible computers, Personal Tax Edge contains everything needed for electronic filing. A full filing service is available separately. Retail price is \$49. State modules also are available for \$49.



For information, contact Parsons Technology in the PC Vendor C Forum (GO PCVENC), Section 8, "Parsons Technology," or One Parsons Dr., P.O. Box 100, Hiawatha, Iowa 52233-0100; 800/223-6925 (toll-free); 319/395-9626 (telephone); 319/395-0217 (fax). Parsons Technology is also in The Electronic Mall (GO PA).

DacEasy Inc.'s Rapid Tax calculates a "best way to file" analysis. In addition to recalculating and updating without rekeying, the program for IBM PCs and compatibles creates attachments for overflow schedules and prints in IRS format. Pop-up windows show the status of the return with the ability to access any form or schedule. It also offers electronic filing using Xpress. Personal and professional versions are available. Retail price is \$49.95.

For information, contact DacEasy Inc. in PC Vendor B Forum (GO PCVENB), Section 8, "DacEasy," or 17950 Preston Rd., Suite 800, Dallas, TX 75252; 800/877-8088 (toll-free); 214/248-0205 (telephone); 214/250-3752 (fax).

Andrew Tobias' TaxCut from Meca Software calculates the 1040 long form as well as more than 75 other IRS forms, sched-

NOW...ON-LINE TRADING THROUGH QUICK & REILLY...



USE ANY PC, ANY MODEM.

...one of the largest discount brokers. ★ **NO start-up charges.**
★ **NO monthly subscription charges.** ★ **Ultra-low commissions.**

With Quick & Reilly's easy-to-use QUICK WAY on-line 24-hour brokerage service...

- You can have from one to 75 trading accounts with NO start-up or monthly subscription charges.
- You also get big savings on commissions.

COMPARE	100 sh	300 sh	1000 sh
	@ 40	@ 30	@ 20
QUICK & REILLY.....	\$49	\$82	\$109
Merrill Lynch.....	97	230	373
Shearson Lehman... ..	91	210	437
Paine Webber.....	100	205	424
Dean Witter Reynolds..	95	195	424
Prudential Bache.....	104	211	421
Smith Barney.....	105	206	410

(Survey 5/91)

- You can get quotes on any stock, option or market index listed in the Wall Street Journal.
- You can place orders in minutes, day or night. Reports are sent back on-line, followed by written confirmations.

- You can monitor, on a single screen, the prices of up to 18 stocks. (You can similarly monitor options.)
- You have instant access to Standard & Poor's Reports, Value Line Data Base II, and 10 years of market data on some 50,000 securities.
- And, any time you wish, you can bypass your computer and get *personal service* from an individual QUICK WAY Account Executive.
- Securities held in your account are protected up to \$2,500,000.

For complete information plus an on-line demonstration and application for QUICK WAY-type GO QWK. Or call 800-666-7972/Ext. 5101 and ask for QUICK WAY.

Quick & Reilly
INC.

MEMBER NEW YORK STOCK EXCHANGE - SIPC
120 Wall Street, New York, NY 10005

a way that it would support my rather unusual deductions as we worked through the audit," he says, noting that many legitimate deductions for him, such as records, stereo equipment and concerts he attends, would be questionable for almost everyone else. "This is one of the few times during the audit interview that you should actually volunteer information. Otherwise, don't say anything unless asked."

The auditor asked him about each of his 1099 forms and a state income tax check that had gone unreported and required him to produce receipts for all his deductions. Jim organized his annual expense diary by category, date, description and amount, making it easy for the auditor to quickly check each questioned expense.

The IRS does not require taxpayers to be represented at an audit by an attorney, certified public accountant or enrolled agent, but the advice from those who have been audited is to get help from these experts.

Investors' Forum member Frances J., a business consultant who has been audited for every tax year since 1979 with the lone exception of 1988, has never personally attended an audit. "Never try to handle an audit yourself!" she advises. "Really, would you perform brain surgery on yourself or represent yourself in a murder trial? Dealing with the IRS should be no less intimidating."

One advantage of using an attorney, CPA

GO OLI for more information.

ules and worksheets. In addition to finding your optimum tax strategy, the program offers "what if" projections, depreciates assets and contains built-in expert system technology. Tax Cut's Interview feature leads you step-by-step



through the process of preparing your tax return with questions and answers customized to your specific tax situation. Designed for the IBM PC and compatibles, it retails for \$89.95.

For information, contact Meca Software in the MECA Forum (GO MECA), Section 6, "TaxCut," or 55 Walls Dr., Fairfield, CT 06430; 800/244-MECA (toll-free); 203/256-5000 (telephone); 203/255-6300 (fax); 703/752-6300 (TaxCut customer support).

TurboTax Personal/1040 (version 9 for tax year 1991) from ChipSoft contains more than 80 forms, schedules and worksheets as

well as the official IRS instructions and plain English "translations." It offers a variety of ways to input data, automatically calculates the entire return and prints IRS-acceptable forms on almost any printer.

In addition to offering tax savings advice, TurboTax checks the return for errors and omissions and items that might trigger an IRS audit. Retail price for this IBM PC and compatible program is \$79.95.

For information, contact ChipSoft in the PC Vendor B Forum (GO PCVENB), Section 7, "ChipSoft Inc." or ChipSoft Inc., 6330 Nancy Ridge Dr., Suite 103, San Diego, CA 92121; 619/453-8722 (telephone) or 800/755-1040 (fax).

TurboTax for Windows Personal/1040 (version 9 for tax year 1991) sells for \$99.95. An IBM or compatible computer running Windows 3.0 or greater and 1MB of RAM is needed (2MB recommended).

ChipSoft CA Corp.'s **MacInTax Personal/1040** (version 9 for tax year 1991), by the makers of TurboTax, contains more than 90 IRS look-alike forms, schedules and work-

sheets. Designed for the Macintosh, this program includes IRS instructions and plain English "translations," as well as tax savings advice and automatic calculation of the entire return. MacInTax checks the return for errors and omissions and items that might trigger an IRS audit. It prints IRS-acceptable forms on almost any printer. Retail price is \$99.95.

For information, contact ChipSoft CA Corp. in the Macintosh A Vendor Forum (GO MACAVEN), Section 17, "ChipSoft Inc."

Although tax preparation programs make it easier to figure returns, be advised that they may contain bugs that incorrectly compute deductions. In addition, the tax information provided with the software may not be complete. Have IRS instructions and tax guides at hand to help you spot potential software problems. If the computer program makes an error, you are responsible.

—CC

or enrolled agent is that this person will be a lot less emotional than you will be during the audit interview. "A representative will not take the auditor's comments personally. This person is also less likely to say more than is required," says David, the enrolled agent.

Of course, using the services of a professional can be pricey. Frances pays between \$3,000 to \$4,000 annually for her accountant's audit assistance. Although one year she owed \$6,000 in back taxes and penalties, the majority of the time the audit results in a "no change" status. The procedure generally takes about four months to complete.

When Frances prepares for an audit, she simply sends the audit notice and copies of her financial records to her accountant. Those who go alone without a tax professional say they spend anywhere from a few hours to several full days preparing for the examination, which can last from two hours to an entire day or more. If additional documentation is needed, you may be required to return for more than one appointment.

Being audited isn't fun, but it's also nothing to fear, says Philip W. "Do not let someone who has been audited intimidate you with horror stories," he says. What other lessons have those who have been audited learned?

- Use a tax professional. Find someone who understands your business and works with other professionals in your field.

WHAT DO THESE DATABASES HAVE IN COMMON?

▲ **Business Database Plus™**

Fast answers to business questions.

▲ **Computer Database Plus™**

The ultimate reference for computers and computing.

▲ **Magazine Database Plus™**

General interest articles for almost everybody.

▲ **Health Database Plus™**

The leading health information resource for non-practitioners.

A lot, actually. Despite the diversity of subjects, these databases share a fast and easy-to-use interface, and provide comprehensive full-text coverage. And now you can download articles right to your PC.

Find it now. Read it later. Type GO BUSDB, GO COMPDB, GO MAGDB or GO HLTDDB at any ! prompt on CompuServe, ZiffNet, or ZMac.

Information Access

COMPANY

GO OLI for more information.

Read More About It

Learn more about IRS audits and the complexities of the home office deduction in articles available in Magazine Database Plus (GO MAGDB). Here's a sampling, all of which can be searched with the article reference number in each citation:

"Accountant's Tip: Rules on the Home-Office Deduction," by Steve Nelson, *Home Office Computing*, June 1991; article #10736197.

"Taking the Home Office Deduction," by Carol Milano, *Home Office Computing*, June 1991; article #10738519.

"Know When to Deduct Your Home Office and PC," by Preston Gralla, *PC/-*

Computing, Nov. 1990; article #09554061.

"Audit Thyself, Says the IRS," by Leonard Wiener, *U.S. News & World Report*, April 15, 1991; article #10560178.

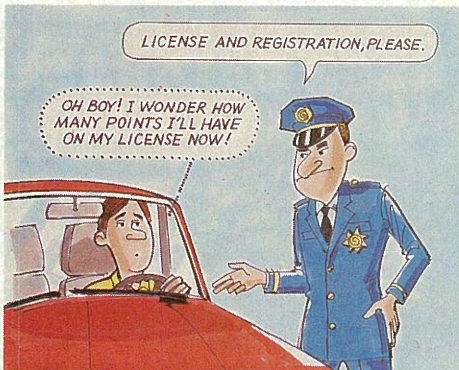
"Tax-Proofing Your Home Office," by Ronaleen R. Roha, *Changing Times*, June 1989; article #07638871.

- Stay informed on the tax code as it relates to your business. Know the general requirements and due dates for payroll taxes, sales and taxes, property taxes, quarterly estimated taxes, business licenses, information returns (1099 forms) and reporting of cash transactions.
- Consider subscribing to publications that help explain tax regulations, such as the *Kiplinger Tax Letter*.
- Take advantage of the experts in the Working From Home Forum. Ask questions and read pertinent files in Section and Library 9, "Accounting/Tax."
- Keep meticulous financial records that are regularly updated and meet the standards of basic accounting principles.

- Report all of your income, including cash income and income received without a 1099 form.
- Know the documentation requirements for meals and entertainment expenses, travel expenses, automobile mileage, cellular phones and computers.
- Protect your records. Keep several backups of electronic records and safeguard paper records as if they were money. If you get audited, these records will be as valuable as money.

- You should keep your records for at least seven years for documentation (the IRS can audit up to six years back for fraud) and forever for copies of returns. Ask your tax professional's advice before throwing anything away.
- Set up a business-only checking account and a business-only credit card. Never use either one for personal bills.
- Consult *Tax Guide for Small Businesses* (IRS publication 334) and *Your Rights as a Taxpayer* (IRS publication 1).
- Don't cheat. If you do cheat, be prepared for the consequences. And they're not pretty.

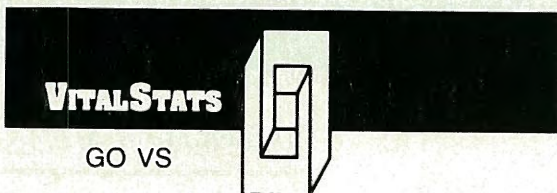
Cathryn Conroy is a senior writer of CompuServe Magazine. Her CompuServe User ID number is 70007,417.



Are you paying more than you should for auto insurance because your insurance company is unaware of certain good driver credits you're entitled to?

Are you being charged for traffic violations that have long since been purged from your driving record?

Find out what's on your driving record.



GO OLI for more information.

Subscribe Now RISK FREE!

Attention PC, MACINTOSH®, APPLE II®,
& COMMODORE® USERS

GO SP

For Monthly Subscription Software
From Softdisk Publishing

- Productivity • Entertainment
- Education • Utilities
- ... and much more!

Quality software
your whole family
will enjoy...

... all for less than
\$10 per month!

For more information call 1-800-831-2694 now
or Go SP on CompuServe

SOFTDISK
PUBLISHING
monthly software

SOFTDISK™ • SOFTDISK G-S™ • ON DISK MONTHLY™

GAMER'S EDGE™ • DISKWORLD™ • LOADSTAR™ • LOADSTAR 128 QUARTERLY™

GO OLI for more information.

Stipulation City: Defining a Home Office

One of the best tax benefits to operating a business in the home is the home office deduction. However, there are certain rules you must abide by in order to make the deduction legitimate.

Your home office must be used *exclusively* for business in order to qualify for the deduction. That is, you may use your home office space only for work. It cannot double as a guestroom or den. You can set aside an entire room for an office or use part of one room. If you do the latter, you can deduct only that part of the room you use as an office.

There are two exceptions to the "exclusive use" rule: If you sell products wholesale or retail, you can use space other than your home office to stock your inventory. The storage space can be used for personal belongings but, according to IRS regulations, the space must be a specific area. Also your home must be the only fixed location of your business. In addition, if you operate a licensed day care facility in your home, you may deduct the business use of any rooms in your house that you use for day care, even if you use those rooms for personal use as well.

Your home office must also be used *regularly* and on a continuing basis for work, rather than what the IRS calls "incidental or occasional" use. To prove you use the space

regularly, you must work regular, scheduled hours each day or week.

In addition, the portion of your home that you use for business must be either your principal place of business or a place where you meet with customers or clients. That is, employees who work in their employer's office all day and bring work home at night—even if it is required for the job—do not qualify for the home office deduction.

Starting with tax year 1991, to figure the home office deduction on Schedule C (it's not on Schedule C but on a separate form that becomes a Schedule C line item), you must first determine the size of your office in relation to the rest of the house. The easiest way to do this is to divide the square footage of your office space by the total square footage of your house. This number is the percentage of space occupied by your home office. Let's say that number is 10 percent. That means you are entitled to deduct 10 percent of your mortgage or rent, real estate taxes, electricity, gas and water.

Home owners can depreciate the home office space, as well as computers and other office equipment. Beware: To write off your computer, you must be able to prove you use it more than half the time for business purposes. (Even occasional personal use could

jeopardize the exclusivity test of your home office.) You also can fully deduct the second phone line into your home (the first line, even if used for business, is not deductible), repair, maintenance and cleaning of your office and office supplies.

There's one more catch. The amount of your home office expenses cannot exceed the gross income from your home business. You can use the home office deduction to bring your taxes on the income earned at home to zero, but you can't use it to produce a loss that will lower the taxes on income earned at a full-time job or from other sources.

If you sell your home for a profit within a year of having taken the home office deduction, you have to pay tax on the portion of the gain that is attributable to the home office. This tax cannot be deferred, since it is viewed as business property rather than residential property, but most tax experts believe you can avoid this tax by not declaring a home office in the year before you sell your home.

Even the IRS admits that home office deductions are a gray area, since the law has been amended several times. In addition, tax court rulings that apply only to Connecticut, New York and Vermont make it easier to take the home office deduction in those states.

—CC

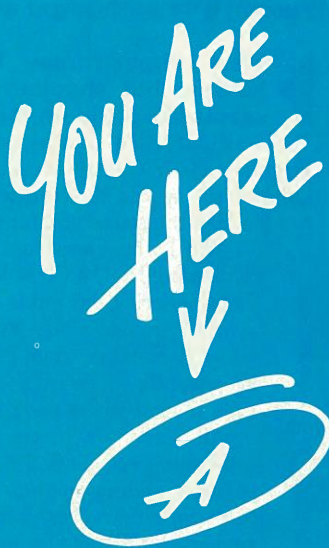
ALWAYS CONNECT- FREE **GO BN** Save Up To 80% On Books, Videos And Audio

Here's what Barnes & Noble,
America's Largest Book Sale
catalog offers you:

- **Books:** hard-to-find, exclusive prints and top quality publisher's overstocks.
- **Videos:** get bargains in classic films, documentaries, children's shows, comedy, drama, performing arts, favorite television shows and a lot more—all at big savings!
- **Audio:** CDs and cassettes of the best of classical music, big band favorites, show tunes, soundtracks—quality recordings at bargain prices.
- On-line questions answered within 48 hours.
- We'll ship worldwide.
- You can receive a free catalog.
- Plus Interesting & Practical Gifts

Barnes & Noble
Booksellers Since 1873
GO BN

GO OLI for more information.





by Nicki and Harold Chodnoff

Trial by Water

A bridge over tumbling waters, West Virginia's Rt. 19 crossing is the world's longest steel arch span (3,030 ft.) and marks the end of the ride: New River

TRAVEL

CM's Travel Credo:

Bring us your tired, your weary, your forlorn spirits and we pledge to ship you out to London, Tokyo, Budapest, maybe even a Wyoming dude ranch. Lengthy luxuries, quick-hit getaways and memories guaranteed.

A Wet and Wild Ride

Tips for White-Knuckle Trips, p. 40

West Virginia may be almost heaven, but shooting its rapids seems like a trip on the Styx.

As we floated down central West Virginia's lower Gauley River, the first in-kling of the rapids to come was a distant rumble, like the sound of a far-off train.

"We'll be heading into 'Pure Screaming Hell,' a Class V rapid," said Jay Connerley, our guide and a seven-year veteran of Class VI River Runners. "Remember, when I say 'forward,' keep paddling forward no matter what, even if what you're paddling is air."

All six of us in the Zodiac-type, self-bailing raft shifted into the ready position: sliding our outer feet under the synthetic-rubber inflatable raft's supports and wedging our inner feet close to the air-filled bench seats to brace ourselves for the ride.

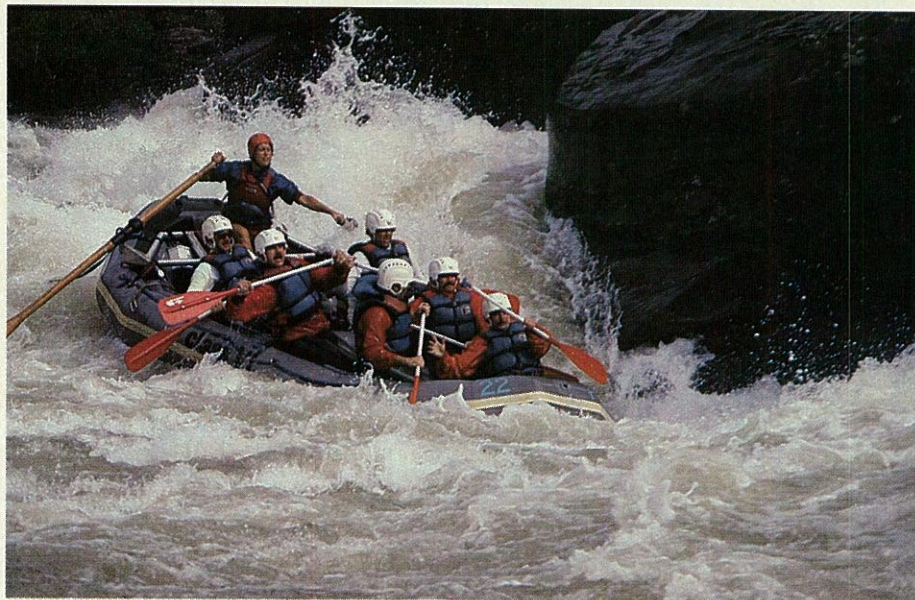
Class V rapids are the most difficult rapids commercially rafted, with powerful and violent water and a high risk factor. Vigorous maneuvering is necessary. We paddled through them furiously, sometimes stabbing at the air as the raft dropped into what seemed to be a thousand-foot abyss. In actuality, it was closer to eight feet, "the hell hole." At the bottom, the churning water curled into huge, menacing waves. Looking straight ahead, all

we could see was a wall of water descending onto the raft, which dipped as the waves crashed down then shot up out of the water. It landed and we weaved around several rocks and swirling eddies before crashing through another half-dozen waves. We tried to maintain balance and stay in the raft. And then it was over.

"Great run," exclaimed Connerley. Momentarily, we had lived on the edge, albeit a fairly protected edge. All agreed, "Pure Screaming Hell" lived up to its name.

Our group could hardly be called devil-may-care adventurers: The six of us were all middle-age or beyond—a nurse, a commodities broker, a retired accountant, a surgical assistant and two journalists. To ensure the safety of novices like ourselves, Connerley steered from the rear of the raft, gauging water currents. Because of his expertise, we could raft like pros on a wild, complex river.

Unlike rivers that gather volume and strength from winter mountain melt-off and spring rains, the Gauley is a dammed river. In the fall, the Army Corps of Engineers releases a measured volume of water from Summersville Dam, the largest earthen dam in the eastern United States. The fall release, called draw-down from summer pool to winter pool, makes room for the anticipated spring run-off and rain that swell Summersville Lake to its summertime recre-



Anything but cushy, the Class V-plus Pillow Rapid lets rafters dodge rocks: Upper Gauley River

Take Me to the River: 800 Listings

Toll-free telephone numbers for businesses offering river trips in the United States can be found in the AT&T Toll-Free 800 Directory (GO ATT). Choose "Look Up an 800 Number" then follow the menu to "Travel" to find listings for "Expeditions Arranged and Outfitted," "River Trips" and other listings for tourist attractions, parks, tourist bureaus, bed-and-breakfast accommodations and more.

ational level.

Because of the draw-down, fall brings with it some of the best whitewater. For six extended weekends (Friday through Monday), people from around the world, particularly whitewater guides from other rivers, come to experience the wet and wild Gauley.

No matter the time of year, the lower Gauley eases you into the action. Just past the halfway point of the lower run, Class V rapids appear. The initial gentleness serves as a break-in period, and calm pools of water between the rapids allow for recovery time.

If the lower Gauley is a challenging, thrill-a-minute ride, the upper Gauley during draw-down is described in hushed tones as "intense." The rapids rate up to a Class V-plus, the most demanding rapids run commercially. It's nature's ultimate thrill ride.

The designation of Class I to Class VI rapids is particular to waterways in the eastern United States. Western waters are ranked up to Class X, with Class I being the easiest under both systems. A Class VI eastern rating is comparable to a Class X western. The classification is given to individual rapids based on danger. With the recent merger of the Western River Guide Association and the Eastern Professional River Outfitters Association into the American Outdoors Association, there will soon be one rating for the entire United States.

From the minute rafts hit water on the

YOU WANT
to GO → (B)
HERE



CLASS VI RIVER RUNNERS

Sturdy and swift, these inflatable synthetic rubber rafts are the floats of choice: River runners

Safer Passage: Rafting Tips

What can you do to ensure a fun and exciting river run? Whitewater experts and Outdoors Forum members Arthur Balajthy, Kit Farwell and Alan Baldwin offer the following suggestions:

- ▶ Make sure the outfitter you choose is reputable. To start, get recommendations from friends or post a query in the Outdoors Forum. Some of the members are river rafting guides and may know of companies in your area.
- ▶ When you find a company, ask questions. How long has it been in business? What is its safety record? How much experience do its guides have? The guide's training, certification and experience are the key to a good trip.
- ▶ Don't bring valuable possessions or anything that you don't want to get wet. Canteens of drinking water, sunscreen and waterproof cameras are fine. Most rafting companies supply all the rafting equipment you need, such as life preservers and oars; some even provide a picnic lunch.
- ▶ In colder months, avoid wearing cotton clothing. It absorbs water and gets cold and heavy. Wetsuits are preferable and

most cold-weather outfitters rent them. Bring dry clothes to change into after the trip. If you wear glasses, make sure they're on a strap. In summer, old sneakers and shorts worn over a bathing suit are popular, but keep in mind that even in summer, the water is still only about 72 degrees.

- ▶ Rafting safety is mostly common sense. Do as your raft guide says; he or she is trained to respond to any emergency situation. Keep your life jacket on and the only injuries you're likely to suffer are sunburn or sore muscles. Be careful trying to walk in rapids. You risk wedging your foot in a rock crevice and getting swept under.
- ▶ The best time of year for rafting depends on what type of river you're going on and where the river is located. In summer, the weather is more comfortable, but the rivers don't have as much water, which dampens the excitement level. The highest—and coldest—flow is in spring.
- ▶ For the most fun, bring squirt guns, sunglasses, food (if not supplied by the outfitter), funny hats, a well-rested body and mind, and a good attitude.

upper Gauley, it's nearly non-stop motion. The put-in spot is just below the dam's three tunnel-like Howe-Bungler outlet valves, which twist out violent streams of water. To overcome the turbulence, everyone must paddle furiously and immediately—instant trial by water. After the treacherous put-in comes the rapids. And on the upper Gauley they're close together.

For the more difficult upper stretch, it's best if you have previous rafting experience and work your way up to the taxing conditions of the Gauley, particularly during draw-down. Still, 32,000 people rafted the Gauley in 1990, and nobody was severely injured, according to Dave Arnold, managing partner of Class VI River Runners.

Rafting on the Gauley isn't limited to the fall. During spring and summer the river is runnable, but unpredictable, subject to the changes of Mother Nature. When water levels are up due to heavy rain, it offers just as fierce a ride as during draw-down. Sometimes more fierce. Heavy rains can swell the river to six times the draw-down volume.

One of the advantages of whitewater rafting in West Virginia, and why these waters are considered some of the best whitewater in the United States, is because so much is found in such a compact space. The Gauley has more than 100 major rapids in its 28 miles. By comparison the Colorado River, as it runs through the Grand Canyon, has 100 major rapids in 280 miles.

About 30 miles from the Gauley River is the New River. It's name is a paradox: It is the second oldest river in the world after the Nile. Civilization is known to have been sustained by the river as far back as 13,000 B.C. And like the Nile, it's one of the few rivers that run south to north.

Broad and gentle for the first 185 miles from its headwaters in Blowing Rock, N.C., the New River merges with the Gauley 256 miles later to form the Kanawha River (pronounced ka-NAW around Charleston, W.Va.) in south central West Virginia. The New River's last 65 miles, where it muscles its way through the surrounding plateau, is what attracts recreationalists. From Blue-stone Dam to Gauley Bridge, the New drops 750 feet in 50 miles, creating a scenic gorge with cliffs up to 1,000 feet above the river and a multifaceted whitewater adventure.

The New, often thought of as placid and gentle, has several faces. The persona it projects depends on the water level and the river portion you're rafting. A good example of this split-personality is a rapid called Surprise. All year long it does just that.

When fall water levels are low, you barely notice a rapid is there. In spring's high water, it washes out and the ride is over a rolling wave. But at medium levels, it becomes the flipping rapid, turning over more rafts than any rapid on the river.

The New, too, offers its share of thrills and spills. During spring run-off, the river swells enormously. At times the high water mark can be up to 40 feet over normal levels. Regardless of the actual footage, the high water creates huge, ocean-like 10-foot-plus compression waves, similar to the rapids of the Grand Canyon. They make the raft stand up almost vertical. Or, if you catch the waves wrong, water pounds down onto your 16-foot professional-class raft.

Summertime is family time on the upper New River. Water levels drop as rain falls off and water temperatures rise into the 70s and sometimes to the mid-80s, making it seem

TRAVEL

like a giant, heated swimming pool. The upper portion, with Class I and Class II rapids, is ideal for timid adult beginners or families with children as young as six.

According to the National Park Service, a river's degree of difficulty varies from rapid to rapid and with water level. They suggest river users consult with an experienced river runner or ranger before attempting river running. Practically, this means selecting an outfitter—one who knows the route. Then remember to precisely follow the guide's instructions. Knowing how to paddle and doing so when the guide directs can make the difference in keeping the raft from flipping. And paddling is one method of stabilizing yourself to prevent falling out of the raft.

Nicki and Harold Chodnoff are free-lance writers in Columbus, Ohio. ◀

Whitewater Files from the Outdoors Forum

Whether you've just decided to take the plunge into whitewater rafting or want to share your river trip tales, the Outdoors Forum (GO OUTDOORS), Section 9, "Canoe/Kayak/Raft," is the place to talk about all aspects of river rafting. The section's companion Library 9 contains numerous files featuring tips, advice, stories and more. The following is a sample of what you'll find.

Novel Experience—A novice's first trip on a Class II+ river. WESRIV.TXT.

Best US Streams—Some of the midwest United States' best canoeing streams are listed. MWRIVR.TXT.

Pennsylvania Creek—Tohican Creek near Point Pleasant on the Delaware River is popular with whitewater enthusiasts. See a GIF map of the area in TOHICA.GIF.

Rafting Outfitters—List of outfitters in New York's Adirondack Mountain area. RAFTIN.TXT.

River Scale—Rate a river on the Class I-VI scale with this IBM-compatible river-rating program. RIVERR.EXE.

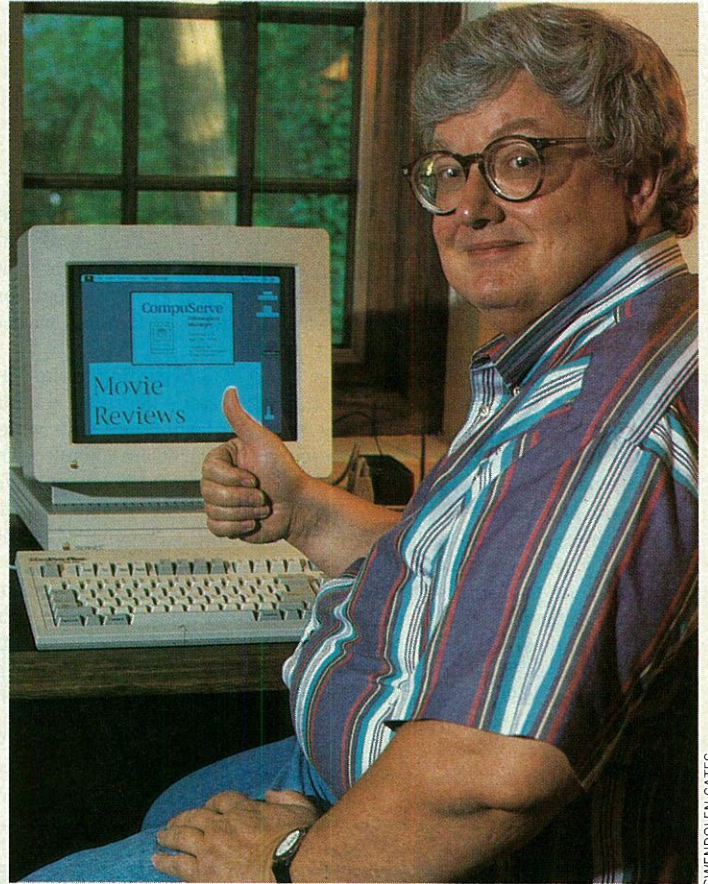


Total Control In Travel Planning That's Complete, Accurate, Fast, Up-To-The-Minute & Easy To Use

- Information rich databases cover everything for business and leisure travel—airlines, cruises, hotels, restaurants, airport-to-city transportation, weather reports and *much* more
- Fast access/Easy to use
- Find and compare the lowest fares
- Airline reservation capability
- Arrivals/Departures updated every 10 minutes
- From OAG, the world's most trusted travel planning source for over 60 years

GO OAG TO ACCESS: GO OAG TO ACCESS: GO OAG TO ACCESS: GO OAG TO

Not All Thumbs



GWENDOLEN CATES

'When all the lights go out, it's just you and the movie': Ebert

PERSONAL BUSINESS

CM's Personal Business Credo:

It's our business to help you achieve your personal best. Wise consumer. Time watcher. Intricate researcher. Savvy politico. Grown-up kid. You've got the need, we've got the gear; it's all right here.

S&E's Better Half

A Youthful Presence,
page 45

Sniper! Goes Graphic,
page 49

► Roger Ebert is half of the famed film review team, but he carries his own in critiques online.

The voice trailing over the phone lines is friendly and familiar—yet, not quite. It needs a bit of heat, some kind of spark, so you can be certain it's really him.

That comes when you ask film critic Roger Ebert about his TV partner and newspaper rival, Gene Siskel. "People want to know if we really like each other. We're pretty competitive. I'll say this," he says, a critic's sureness in his voice, "I'm more computer literate."

To millions, Ebert is known for sitting opposite Siskel in a movie theater balcony, spewing his views on various films and attacking those of his co-star before a camera. On TV's weekly *Siskel & Ebert*. Theirs are among the heaviest thumbs in show business; a "thumbs up" or "thumbs down" might send or keep their 6 million viewers to or from movie houses.

But while TV has knit them together in the minds of millions, they've long stood on their own. And as of last fall, CompuServe members have had a chance to read and get to know Ebert in a new database (GO EBERT) packed with his reviews, celebrity interviews, even tips on how to attend a film festival. The only win-

ner of the Pulitzer Prize for film criticism, Ebert also regularly chats with members in the Consumer Electronics (GO CEFORUM) and the ShowBiz Forums (GO SHOWBIZ).

Ebert admits to being a computer nut. Like many others, he got hooked on the look and feel of computers—and how easy they suddenly made life. A big fan of electronic mail, Ebert recalls how he used to have to transmit movie reviews to his newspaper when on location.

"At the Cannes Film Festival, in the old days, we used to have to type our stories and take them to the telex operator. They'd come over with countless mistakes," he says. Ebert recalls a story he wrote saying that, at a reception for actress Farrah Fawcett, "900 balloons were released." Somehow in transmissions it came out "900 falcons." "We ran a correction. But in the meantime, Cleveland Amory of the Fund for Animals had protested."

Electronic mail is now something he can't live without, and he talks as enthusiastically about it as he would a movie. He uses it on CompuServe, which he joined in 1983 to satisfy his hunger for things computer. The ShowBiz Forum is his main hangout. When he dipped into forum conversations, he shocked members by signing his real name.

"I got a lot of electronic mail asking me if I was the *real* Roger Ebert," he says. "But

Roger & Me, Yakking It Up

Where can you talk to Roger Ebert?

You'll be certain to find the Pulitzer Prize-winning film critic in his own database (GO EBERT), where you can talk specifically with him, or in the Consumer Electronics Forum (GO CEFORUM), where he likes to talk about audio/video equipment. But Ebert also hangs out in the ShowBiz Forum (GO SHOWBIZ), where he has stimulated conversation—and surprised CompuServe members.

He's most often asked where to find a particular film, or if it's available on video. (Check "A Movie Lover's Source List" in GO EBERT.)

Occasionally someone will challenge him. ShowBiz Forum Manager Louis Epstein remembers one man charging that Ebert often gave "thumbs up" to Disney films, since a division of Disney produces *Siskel & Ebert*. Ebert uploaded all of his Disney reviews; half were favorable. The man apologized. Says Ebert, who seems easy-going, "Some people are always arguing."

Epstein suggests you keep your questions and comments short and to the point if you plan to talk with Ebert. Keep in mind, he can't answer everything.

—JL

that's the one question I won't answer. I mean, life is too short to answer that."

Sometimes forum members seem to want to challenge Ebert about reviews they've seen him give on TV; other times they're curious about movies. He seems game to answer as many queries as he can. "I'm getting lots of messages," he says, "though the problem with e-mail is that people on the other end can't tell what tone of voice I'm using. I've had people get messages from me and think I was saying it in one tone of voice when I actually wasn't."

Computers and newspapers help him to maintain the persona he has developed since becoming *The Chicago Sun-Times* film critic in 1967, a persona independent of his TV twin. "Writing (newspaper) reviews gives me an opportunity to put my opinions exactly," says Ebert, whose reviews appear in about 200 papers. "And a chance to say I'm not half of Siskel and Ebert. I'm whole Ebert."

Ebert also has established his identity as a writer in other ways. This year, his Victorian novel *Behind the Phantom's Mask*, published in a 52-installment serialized newspaper version last year, will arrive in book form. A fan of 19th-century cliff-hangers, Ebert took a shot at his own tale with the encouragement of his editor. The novel features a cast including a British actor, an heiress and a gossip columnist. "It's very innocent—not a single four-letter word in it," he explains.

There's also his thick and informative annual film guide, *Roger Ebert's Home Movie Companion*, in its seventh year of publication; a film appreciation course he has taught

for more than 20 years in a packed auditorium at the University of Chicago; and his full-time newspaper job, which sends him to numerous film festivals and places such as Los Angeles to interview celebrities.

Most days he sees two movies by mid-day and finishes the reviews, taking no notes and writing from memory. Other days find him crafting a longer story for his Sunday paper, or writing his portion of the script for the TV show, which is taped on Wednesdays. Traveling to film festivals is common, and a whirlwind working weekend might find him in Los Angeles to see four films and do eight interviews. Still, he seems to have no trouble squeezing in computer time. He logs on to CompuServe from the road with his portable computer, or late at night from the Macintosh in his home office.

He relaxes with his fiancée, Chicago attorney Chaz Hammel-Smith, in his weekend home in Michigan watching—you guessed it—more movies. "I enjoy movies and I probably spend less time looking at movies than most people spend at their jobs." He likes them, he says, because they're a way to be someone else. "It's a voyeuristic experience. They also make you laugh."

The job of a critic, Ebert says, is "to be an ideal member of the audience." The critic can take the time to do the dirty work—if the film is bad—or make the recommendation if the film is good. A reader also has a role: "to find a critic he or she generally agrees with."

Ebert knows about disagreeing, too. Just watch the show. Or talk to other people about films. Something about movies provokes discussion. "People are talking about their own

GO PCA!

GO PCA to view
PC CATALOG, the
revolutionary new
comparison shopping
database for PC buyers. Real,
competitive prices (not
suggested retail prices) from
vendors across the country.
Shop and compare — then
pick up the phone and
place your order!

PC catalog

GO OLI for more information.

Now just point-and-click for OAG On-line Travel Information!

Airline	Time	From	To
Continental Airlines	6:50 AM	Boston	Cleveland
Continental Airlines	8:45 AM	Cleveland	San Francisco
Continental Airlines	9:40 AM	San Francisco	Boston
NORTHWEST	12:00 PM	Boston	San Francisco
NORTHWEST	7:00 AM	San Francisco	Boston
UNITED AIRLINES	11:42 AM	Boston	San Francisco
UNITED AIRLINES	8:00 AM	San Francisco	Boston
US AIR	11:19 AM	Boston	San Francisco
US AIR	9:00 AM	San Francisco	Boston
US AIR	5:08 PM	San Francisco	Boston

with
TAKE FLIGHT!™



The Travel Information Utility

Now Macintosh® users can get travel information from OAG with all the customary simplicity of the Mac user interface.

Use Take Flight to...

- Set up your travel inquiries off-line, using the built in lists of world airports and airlines
- Let Take Flight connect to CompuServe/OAG for you, and download all the information you've requested - automatically! No more commands, no more codes, no more confusion!
- Browse your schedules, fares and hotel information on-line or off-line - with lots of display options to help you pick out the best routes and prices for your needs.
- When you've found the best flight - book it! Enter all the details and let Take Flight go on-line again for you, to book that flight - error free and FAST!

OAG
simple, fast
and fun too!

ONLY \$149
Introductory Price

for more information

Phone (800) 253-5542
CompuServe 73767,705

LATERAL THOUGHTS
335 Pearl Street, Cambridge MA 02139

GO OLI for more information.

Gone Hollywood: Online News and Reviews

Movie buffs, take heart. There are plenty of offerings online to satisfy your celluloid souls. CompuServe features:

Roger Ebert's Database (GO EBERT)

This comprehensive database contains the film critic's most recent reviews, which can be searched by film title, actors or directors; various celebrity interviews, essays by Ebert; tips on how to attend a film festival; a glossary of movie terms; Ebert's top 10 films; and a feedback function to let you talk directly with him.

Hollywood Hotline (GO HOLLYWOOD)

Run by Eliot Stein, the database is packed with entertainment offerings. Stein reports Hollywood happenings daily—everything from which stars have just signed movie deals to what's newly available on home video. He also maintains an entertainment encyclopedia, which includes listings of Academy Award-winning films, and keeps a current collection of movie reviews.

ShowBiz Forum (GO SHOWBIZ)

This forum allows members to debate, discuss and delve into the world of entertainment. Among the topics in the database: motion pictures, TV, music, celebrities, soap operas, radio, theater and stage, and media ethics. In addition, Joe Bob Briggs, defender of the declining art of outdoor cinema and reviewer of straight-to-video "B" movies, uploads the text of his weekly syndicated newspaper columns, "Joe Bob Goes to the Drive-In" and "Joe Bob's America" to the forum's Library 13, "Comedy." Search for file prefixes DRIVE and AMER.

Magill's Survey of Cinema (GO MAGILL)

Provided by *Magill's Encyclopedia of Movies*, this database (which is surcharged) gives in-depth, technically oriented information about movies dating back to 1902. A user can learn the cast, technical information and awards of a movie, and get a brief synopsis of the plot.

PERSONAL BUSINESS

feelings," Ebert says. "When all the lights go out, it's just you and the movie. It's more like a dream state. It's very personal."

Ebert watched movies in wide-eyed fascination, like the other kids paying 9 cents at the Princess Theater in Champagne/Urbana, Ill., where he grew up. But journalism was on his mind. He worked nights and weekends covering sports and later car crashes and spelling bees for a community paper while in high school. As a staffer on the University of Illinois newspaper, he wrote a film review or two. After a year at the *Sun-Times*, he was offered the film critic's job, which he covers with the passion of any beat reporter.

"He's one of the most competitive newsmen I've seen," says Dennis Britton, editor of the *Sun-Times*. "He'll watch six or seven movies in a day and review them all just to get them in first."

Appearing on TV felt odd to him at first, but as viewers can see, Ebert looks as comfortable on screen as he must

be in his V-neck sweater. "I like the fact that we're able to call attention to small films, films that are overlooked, films that people might miss," says Ebert, laughing as he remembers how the early shows used a dog to indicate the week's worst movies.

The thumbs system is easier. And while thumbs-up and thumbs-down pervade today's culture, and while Ebert is happy to take credit for his opinions, he disassociates himself with the spread of the thumbs.

"No," he says, "the Romans really got to it first." And he and Siskel weren't around to argue then.

Jennifer Lowe, based in Los Angeles, is a feature writer for The Orange County Register.

Whiz Kids with Keyboards

► What happens when the youthful log on? More than you'd think.

Ken Loss knew that his daughter, Rachel, spent her free time looking over his shoulder while he led an Education Forum section. But even Loss, president of a Dallas computer graphics company, didn't know the effect his online activities had on her until he checked his CompuServe messages while at a Las Vegas convention.

Nine-year-old Rachel was sad because she had been asleep the first two nights when her dad called home. She rea-

soned that CompuServe could connect her with him. "I had to figure for myself how to get on," recalls Rachel. The third night, Loss was startled to find that Rachel had sent a goodnight message to his account number.

Rachel isn't the only computer "whiz kid" to interact on CompuServe. Many youngsters 14 and younger log on to various forums—and on a regular basis, too.

These kids are not Calvin-and-Hobbes types doing mischief on CB Simulator channels or peeking into the Human Sexuality Forum. Many maintain dignified and helpful online presences. Since the question of age rarely surfaces online, they usually are indistinguishable from the adults.

"One of the things I love best about this medium is that we get to deal directly with people's thoughts," says Doug Pratt, manager of the Comic Book Forum, where many young people participate. "The usual things that color our reactions—age, sex, race, whatever—never enter into it unless the people involved choose to bring it up."

Some parents may be

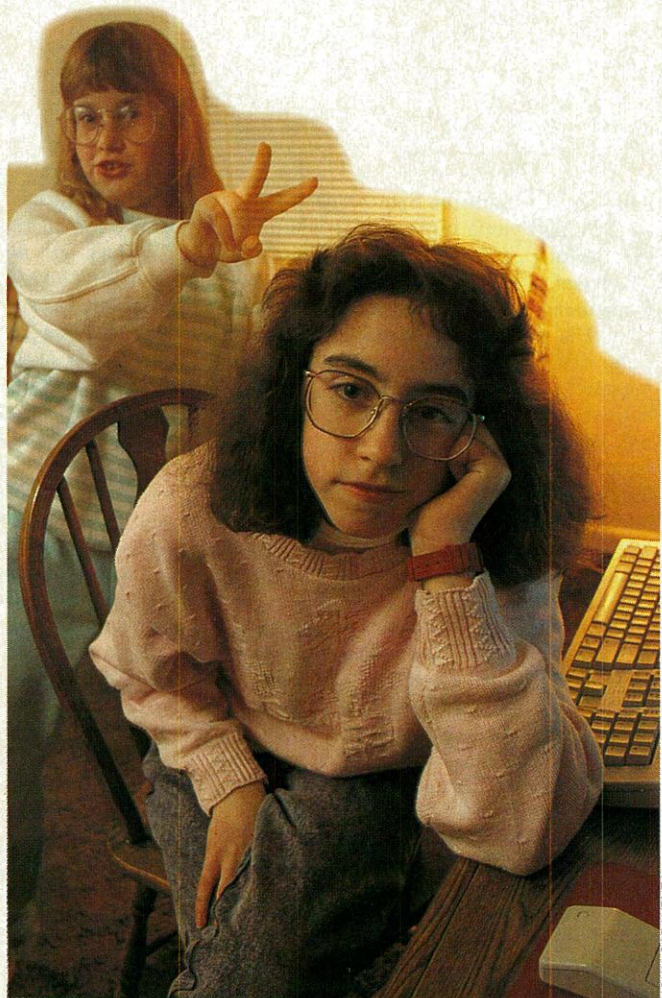
reluctant to let their children online before age 15, fearful that they might be interfering with "normal" progress in other areas of their children's lives. Some educators, however, believe this is a needless worry.

"Fifteen is far too old for kids to be starting to use computers," argues Dr. Kurt Harper of the Apple Valley (Calif.) Unified School District and member of the Education Forum. "They should begin as soon as they show interest in it. As to their getting active in forums normally used by adults, I think the borders are very fluid and entirely dependent on the maturity and interests of the participants."

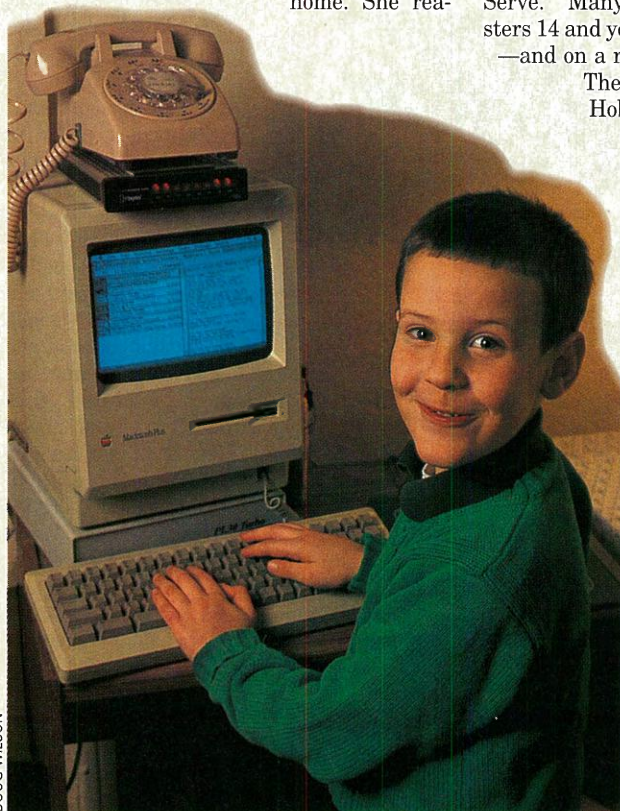
The anonymity of being online permits youngsters to dare to challenge the views of adults online, thereby improving both their thinking processes and their self-confidence, adds Jim Muller, Education Forum member and a founder of the 6,000-member computer programming association for young people. "They'd never do that [challenge an adult] in the classroom," he says.

Ninth-grader Marcus Brown, 14, of Bolingbrook (Ill.) High School considers CompuServe to be both an educational and fun activity. "I've stopped by the Foreign Language and the Students' Forums to check out my options," says Marcus. "But I am also into sports—wrestling, baseball and basket-

Surveyed forum folk for dominant-gene data: Berstene



JOHN GARAVENTA



DOUG WILSON

Home-schooled scamp sends e-mail to pen pals: Yolland

ball—so I frequent the Sports Forum.”

A Pennsylvania ninth-grader whose hobbies include computers and airplanes likes the benefits of the Aviation Forum. Kyle Oppenheim, 14, comes by these loves naturally. His grandfather encouraged his computer development by giving the boy his old personal computer in 1987. His father, a dentist and pilot who owns a Cessna Cardinal, has given him permission to take flying lessons in a few months. Kyle already has a Microsoft program that allows him to simulate flights, and he uses a computer to get weather information directly from the Federal Aviation Administration before his father takes him on-plane rides.

Kyle and his dad converse with other forum pilots about hypothetical flying situations. They once started a discussion by asking what would happen to a plane taking off at 50 knots if head winds at the same 50 knots whipped into it. “It was a lively debate,” says Kyle. “Some people said we’d stay put; some said we’d fall out of the sky.”

Unlike Kyle, 13-year-old Ryan “Turtle” Tuttle of Hampton, Va., prefers keeping his feet on the ground. As a member of Compu-

Serve’s Outdoors Forum, he talks to members online about camping.

Ryan’s odd nickname and his penchant for making jokes make him a familiar online character. He strikes fellow forum member Boyd Critz as “a normal kid with a normal kid’s sense of humor and a whiz kid at leadership” as a Boy Scout patrol leader. Last July, “Turtle” regaled the forum with tales of how his patrol fared at summer camp—100 percent attended and all earned a minimum of three merit badges.

Turtle’s interest in IBM-compatible computers and camping came about because of his uncle, David Saunders, a professional computer programmer and member of the Outdoors Forum. “I encourage him all I can,” says Saunders. “I was using the computer one day, and he saw me and got interested.”

Many parents believe that skills developed through online communication will provide lasting value in life. “It’s better to have a youngster in front of a computer than in front of the TV,” says Kenneth Oppenheim, Kyle’s father. “Soon they’re going one-on-one in normal conversation, which is good for extemporaneous thought and speech.”

Oppenheim says that Kyle, normally shy, turns effusive when he relates to others online. Youngsters

get a boost in self-esteem when they see that they can handle a computer and put their thoughts on a screen, says clinical psychologist Joseph Cassius of Memphis, Tenn. “Anything you can do that gives a sense of expertise and a sense of functioning well increases your positive self-image,” he says.

Parents who fear that using a computer for recreation will keep their children from enjoying cultural or outdoor pursuits should take heart from Cynthia Shobert, 14, who also plays the flute, basketball and volleyball, when she’s not riding horses.

Despite her sundry interests, she finds time to check in daily on the Gamers’, Pets and Students’ Forums. She’s particularly active in the Pets Forum, participating in sections devoted to animal rights, small mammals, exotic animals and dogs.

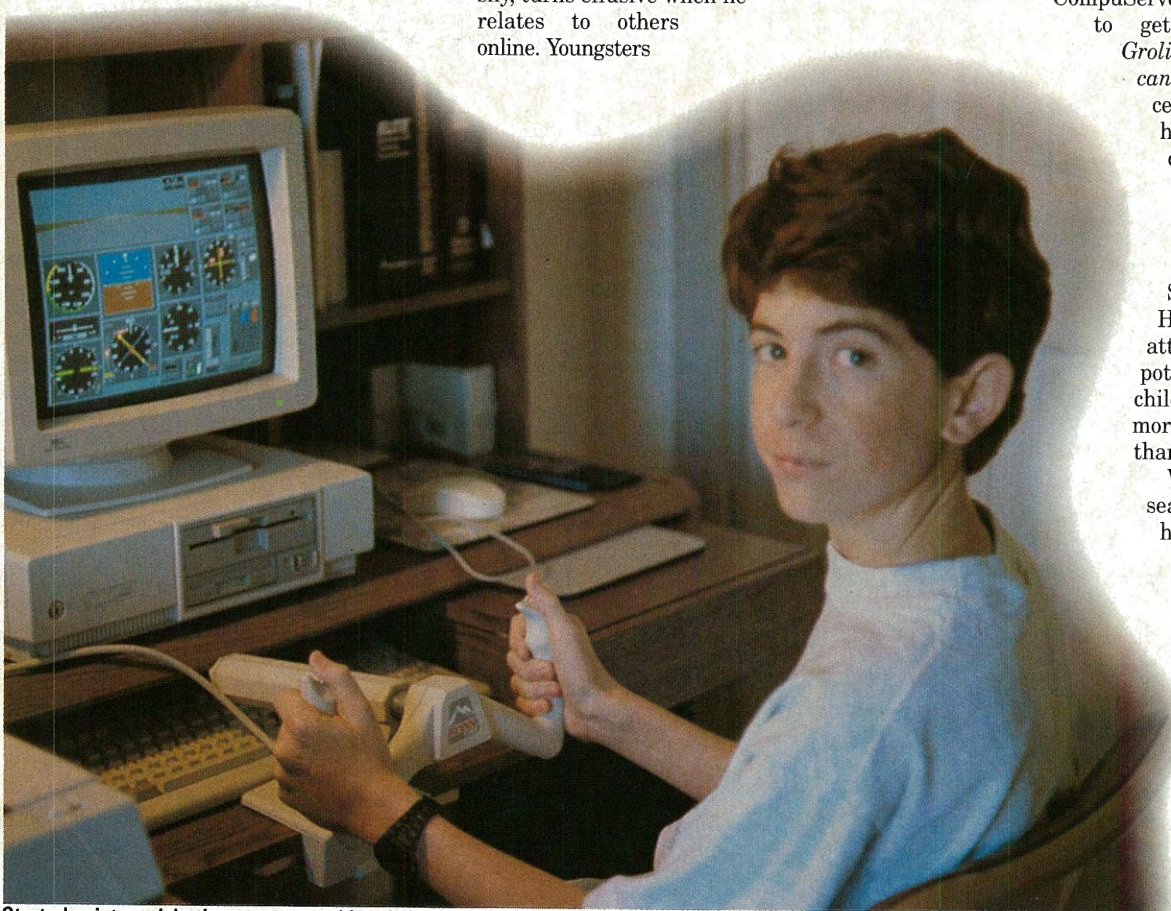
Her father, James F. Shobert, a Consumer Electronics Forum sysop, says her participation delights him. “She answers messages rather than lurking, and has established quite an extensive pen pal list,” he says. “Even when we are on vacation, Cynthia is on CompuServe with my laptop.”

Elizabeth Berstene, a 13-year-old at St. Bernard School in Rockville, Conn., has used CompuServe for two years, mainly

to get information from *Grolier’s Academic American Encyclopedia*. She recently branched out, however, when she decided to use CompuServe to help her develop a project that had been selected to go to the Connecticut State Science Fair. Her experiment was to attempt to prove the hypothesis that the oldest child in a family gets more dominant genes than do younger siblings.

While her original research indicated that her hypothesis might be true, she sought additional data to reach a definite conclusion. Consequently, says Elizabeth, “I decided to use CompuServe as a way to distribute a survey.”

Elizabeth posted her survey in the Genealogy and His-



Started aviators debating same-speed headwind takeoff: Oppenheim

The Kids' Clubhouse: Gamers' Forum

Youngsters under 15 years of age will find that some CompuServe forums interest them more than others. The Students', Pets and Sports Forums will captivate some kids, while others partial to New Wave bands may find a home in the RockNet Forum. But one forum that nearly all youngsters say they enjoy is the Gamers' Forum (GO GAMERS).

No matter what your taste in games, you'll find someone online with an opinion about it. Have trouble getting past Stage 3 on your favorite electronic game? The solution is probably already in the forum's extensive library. If not, send a message online and see how quickly you get help. If chess is more your speed, you'll find plenty of tournament action here. Sports games. Action Games. Adventure games. Cartridge games. War/strategy games—whatever your preference, it's here.

When you're having trouble, it may just be 14-year-old Cynthia Shobert from Commack, N.Y., who has a solution. "In Gamers' I try to answer messages when people are having trouble or have just joined the forum," says Cynthia, who also attends Adventure conferences.

Also providing expert advice and help is Patricia Fitzgibbons, the Nightshift chief sysop, who, like many forum members, prefers to be referred to by a catchy handle—"Nightie." If you're a newcomer, "be sure to visit at least several of the libraries and use the SCA SHO command to display a list of titles," recommends Nightie. You'll see lots of good stuff—especially in Library 2, "Adventure Games"; Library 7, "Action/ Arcade Games"; and Library 9, "Computer Role-Playing Games."

One of the long-time members is Steve Gordon, better known

as "Flying Gerbil." A sophomore at Cape Cod Academy, Steve is well-known for hosting some of the best conferences online—particularly in the area of game design. "The Gamers' Forum is one of the best forums around," says 15-year-old Steve. "I am accepted as just another abnormal member of this forum—not as a little brat who must be tolerated to fill some quota."

"When I came here, I was amazed at how helpful everybody was to some annoying, fuzzy teen-ager. I'm still fuzzy and I'm still a teen-ager—working on the annoying part—but this is a great place to talk about computer games or anything else. It's also rather useful for sharpening English skills—as mine were woefully imperfect before coming here."

Dan Wicker, a seventh-grader at George Walton Academy in Monroe, Ga., says one of the most rewarding things about belonging to the forum is all "the adult friends" his participation has earned him. "I use the Gamers' Forum for cartridge gaming (such as Nintendo and Sega) info," he says. "I personally like Sega Genesis games such as *Streets of Rage*."

Talking about hints and tips is the next best thing to playing the games themselves, according to Dan,

known as Diskman in the forum. He calls the games "fast-paced, hard and really exciting."

Besides being fun, winning at computer games is good for a computer whiz kid's self-esteem, says clinical psychologist Joseph Cassius of Memphis, Tenn. Youngsters take pleasure "in knowing they have succeeded in beating a game and in being able to control the game's outcome."

—HN



RICHARD LILLASH

tory Forum and found that her respondents were very enthusiastic. She is using survey results "to calculate the sum of dominant and recessive genes for all children" after comparing her results to known research.

Her father, Mike, says the skills his daughter learns online go beyond the mere acquisition of facts. "The educational value exceeds the value of the information collected because she is learning to find information in a computer-based world," he says.

Another student using CompuServe to give him an edge in school is Barry Soben, 14, of Beverly Hills, Calif. When he has a report due, he refers to Magazine Database Plus, "so I do not have to manually search *Reader's Guide to Periodical Literature* at the library."

Barry says his ability to access information online saves a lot of time and "helps me be more efficient in getting my work done." He also uses the *Academic American Ency-*

PERSONAL BUSINESS

lopedia, calling it "great for getting a general overview of a subject."

Barry has used computers since his introduction to an Apple II in elementary school. "I give my first-grade teacher—who later became a computer teacher—full credit for getting me interested in computers," he says. When they saw their son's enthusiasm for computers, Barry's parents bought him a Commodore Vic-20 and later an Apple IIe with a 1200-baud modem.

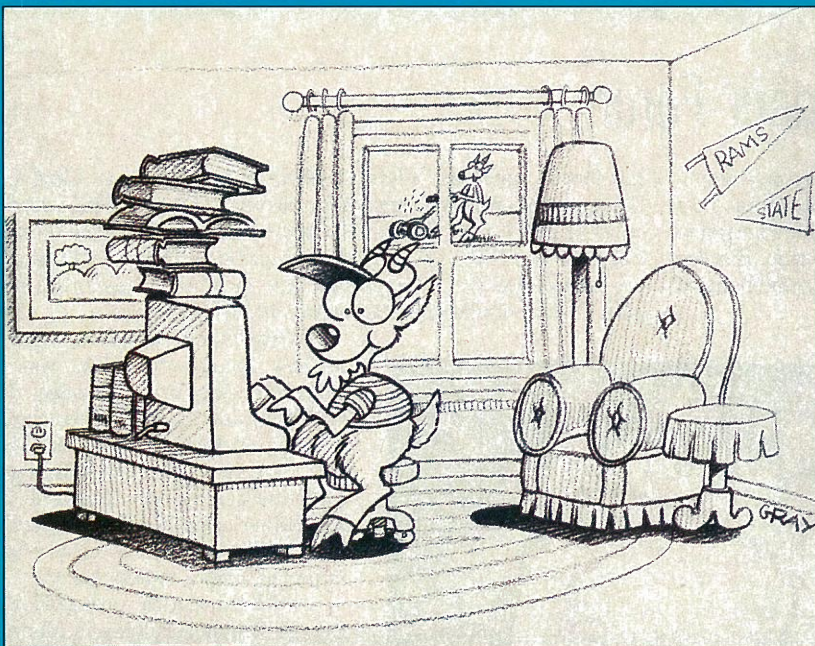
In addition to using CompuServe for school work, Barry uses the service to enhance his love of electronics. He became an amateur radio operator a year ago and joined the Ham Radio Forum to get files not available on most bulletin boards. "In the process, I've 'met' quite a few nice people," he says.

While the recreational, social and even educational benefits of CompuServe participation make it a highly desirable activity for youngsters, clinical psychologist Joseph Cassius cautions that parents and kids

should be ever vigilant because games sometimes can play people. "Parents need to provide guidance and should not be afraid to set limits as to when a computer can be played with or used," he says. "Parents have to view a computer just as they do any other facet of a kid's life."

Without limits, youngsters can find computers addicting, warns 14-year-old Nick Ryan of Rochester, N.Y. In a single month, Nick ran up a \$1,000 bill playing 3-D video games on a network other than CompuServe. In addition, as a staunch *Star Trek* fan, he spent too many hours talking to other "Trekkies" on CompuServe's Science Fiction Fantasy Forum, temporarily hurting his grades. "Every day I downloaded 200 or 300 messages," he says.

When they realized what was happening, Nick's parents pulled the plug on his extensive computer use. "I saw that it was doing harm," he says, adding that he now treats himself to infrequent but rewarding visits to the Science Fiction and Gamers' Forums.



So easy a kid can use it.

Don't let the search for information get your goat.

IQuest's 850 plus databases offer you instant access to millions of articles, abstracts and citations from hundreds of magazines, journals and newspapers. All within easy reach of your keyboard.

Find current and comprehensive information on a range of interests, including business, medicine, technology, education and law. What's more, live, interactive help is available through IQuest's SOS feature.

When it's information you need, IQuest has got what you want. No hassles. No delays. No kidding.

This month, the savings are easy, too. All IQuest SmartSCANs are half price!

IQuest's SmartSCANs help you determine which databases in a subject contain the information you want. So whatever your interest, you'll find the facts you need. Quickly. And simply.

For February only, all IQuest SmartSCANs are only \$2.50 (that's 50% off the regular charge).

Complete details online.

IQuestSM

GO OLI for more information.

Even more so than do employed adults, children who are using a parent's access code need to keep expenses down, recommends David Nir, 14, of New York City. When he first tried CompuServe, he found himself wasting "an incredible amount of money" composing and reading messages online. Eventually, two TAPCIS sysops and Gamers' Forum section leader Mark Betz taught him to upload and download messages to keep charges to a minimum. With the money he saved, David was able to visit other forums.

Now David helps other members understand his favorite CompuServe autopilot, TAPCIS, while he discovers the pluses and minuses of Autosig and CISOP. "No one should be without an autopilot," he says.

David's parents—both nationally known authors—are supportive, but he's largely self-taught. "I am the computer 'whiz' in the family," he says. "My father is computer illiterate, and my mom, even though she owns a laptop, can just barely make her way around in WordPerfect."

Bright and articulate, David easily converses with adults and takes pride in his online participation at such an early age. "I am by far the youngest active member who hangs out in the computer forum sections," says David, who sometimes signs his name as "The Kid."

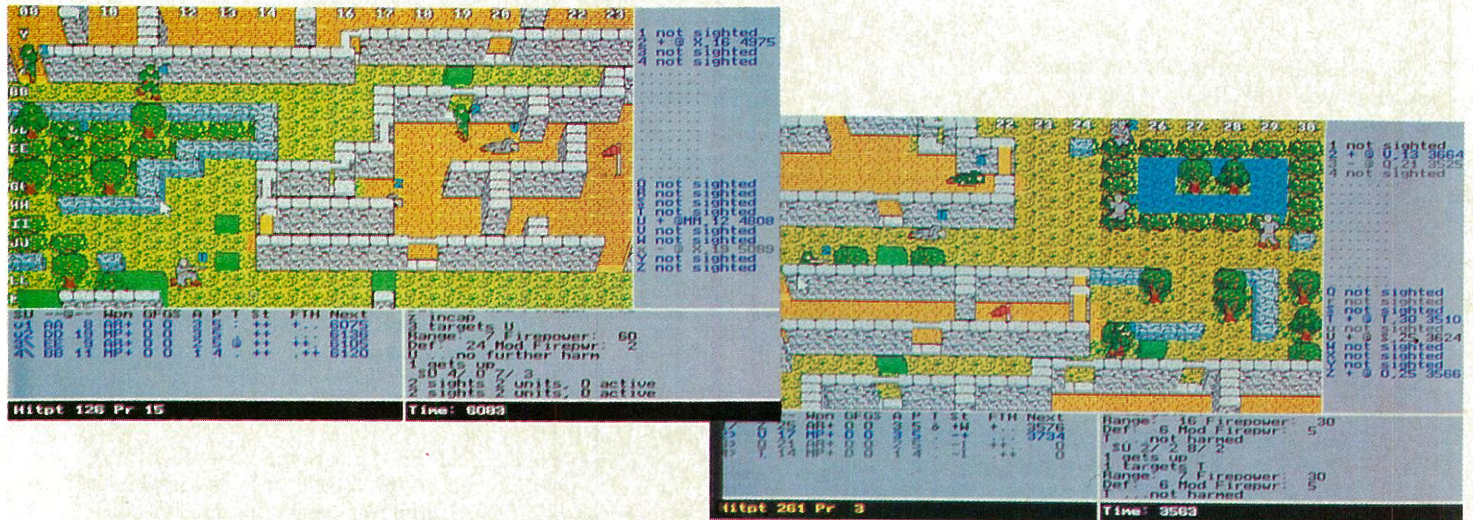
The satisfaction that youngsters such as David get online is matched by adults who converse with them, says Muller. "When you have the opportunity to motivate an unfettered, unconditioned imagination, that's something special—don't blow it," he says.

Adults who wish to interact online with young people can help the quality of communication by keeping in mind that some youngsters may be less adept at extemporaneous writing, says Muller. "Ask questions and gather information," he advises. "Try to get a picture of the person behind the keyboard, and never talk down to a child."

One of the youngest regulars online is 6-year-old Andrew Yolland of Seattle, Wash. A precocious student who is schooled at home by his mother, Andrew likes hanging down from a tree branch "like a sloth," he says, "as well as working on arts and crafts and conversing with several pen pals online." One of these faraway friends is Adam Nuwer, a 6-year-old student at Kernsville Elementary School in Pennsylvania, who was introduced to CompuServe by his dad—the author of this article.

"I like sending messages across the country," says Adam. "I can send them faster than I can zip my coat."

Hank Nuwer is the author of 13 books, including Broken Pledges: The Deadly Rite of Hazing.



Full-color imagery has replaced a maze of tangled ASCII, but the strategy's the same: Scope interface

Sniper! Aims High

▶ The World War II battleground game gets a graphic interface.

I spotted an enemy unit on the right; haggard faces peered through windows of an abandoned building. To the left, the flag flapped in the breeze.

I dropped to the ground and ordered Jake to back me up. I crawled to within six feet of the flag when shots whizzed over my head; Jake fired back, and other units joined in.

Suddenly reality hit; I bolted upright in my chair. How do I grab the flag? I hit the pull-down menu, punched "Radio," and typed a fervent message to the other players.

"Uh, how do I grab the flag?" I typed.

A friendly message flashed back across my screen: "Hit your F10 key to pick it up." I did; and my character grabbed the flag on-screen, ready to run.

Unfortunately, the friendly messenger punched a few buttons of his own. Within minutes, he'd wiped out my unit, and I found myself back in the online Saloon.

It was just another night with *Sniper!*, CompuServe's popular role-playing game with a new twist: A graphic interface called "Scope" brings high-resolution color graphics to the screen. Players watch their soldiers navigate the terrain and, most important, keep a wary eye out for the enemy.

The new Scope interface brings *Sniper!* to its third level of play. It started as a popular TSR board game; then game pro-

grammer Steve Estvanik wrote an online interface for CompuServe, and the multiplayer game made its debut in April 1989. Like many games at the time, *Sniper!* relied on ASCII characters and a little imagination to track the action.

"Back in 1989, *Sniper!* was ASCII alphabet soup," remembers James Pascua, CompuServe games product specialist. "Your soldiers were Roman numerals; enemy units were letters, and open ground was a period. You had all these symbols on-screen, and you had to imagine that you were walking through a forest, or heading down a dark alley between buildings."

The new Scope interface logs players onto CompuServe automatically, then drops them into the Saloon, ready for action. Scope replaces alphabet soup with a full-color, overhead view of soldiers, buildings, trees and, if you keep your sights up, the dastardly (but still friendly) enemy players.

"With Scope, you have real soldiers holding real weapons," says Pascua. "You can see which way they face; a tree is green and streams are blue. It's like a completely different game. Comparing two pictures, you wouldn't believe they were the same game!"

The game's concept has remained the same, however. The multiplayer war game places competing players on the battlegrounds of World War II. The squads of

PERSONAL BUSINESS

soldiers compete in a close simulation of historic wartime conditions, recreating not only the geography and weaponry of the time and place but also the strengths and weaknesses of individual soldiers.

Players maneuver their squads through rugged, war-torn terrain, alert for enemy ambush at every step. It takes skill, speed, stealth, daring and a little luck to outmaneuver and outfight your opponents.

Most players head for a free-for-all mission called "Supersolo." There, they compete against a computer-generated squadron, but keep track of other players' squads as they log on to join the action.

Although the fighting is fierce, so's the friendship. Players can talk among themselves, and newcomers can easily find help.

"More than 600 'new' players enter the Saloon each month," says Gary Weintrob, known online as "Mendor of the Void." "When I see new players, I spend quite a bit of time in the Saloon, in the Multiplayer Games Forum and CompuServe Mail helping them learn to play the game better. Most *Sniper!* players are willing to answer questions from new players, even during games."

After logging on with the Scope interface, new players should head for the Bootcamp to practice positioning their players. Scope provides pop-up menus that prompt players through moves and teach the quicker key-

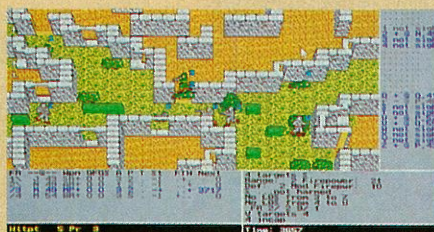
Scope: What You Need, How to Get It

Scope requires an IBM PC or compatible computer with 512K RAM, an EGA or VGA card and monitor, and a Hayes-compatible modem. A 286 or faster CPU works best, and a mouse helps navigate the push-button menus, but neither are required. Scope is designed to teach beginners how to play the game the fastest way: by typing direct commands through the keyboard.

To check out the action, GO SCOPE and download the self-extracting Scope program, SCOPEX.EXE. The 213K file contains the program, documentation, a glossary, a description of the game and a handy set of reference cards.

After downloading, log off and type SCOPEX.EXE followed by a carriage return to unpack all the files you need. After reading the documentation, type SCOPE.

The program asks for your CompuServe User ID number, password and other terminal information. With Scope, you won't need a telecommunications program: Scope automatically logs on to



The setting for *Smoke and Rubble*: Scope

CompuServe, and brings you to the Saloon to start the online adventure.

The download costs \$2, but users aren't charged for connect costs while they're receiving the file.

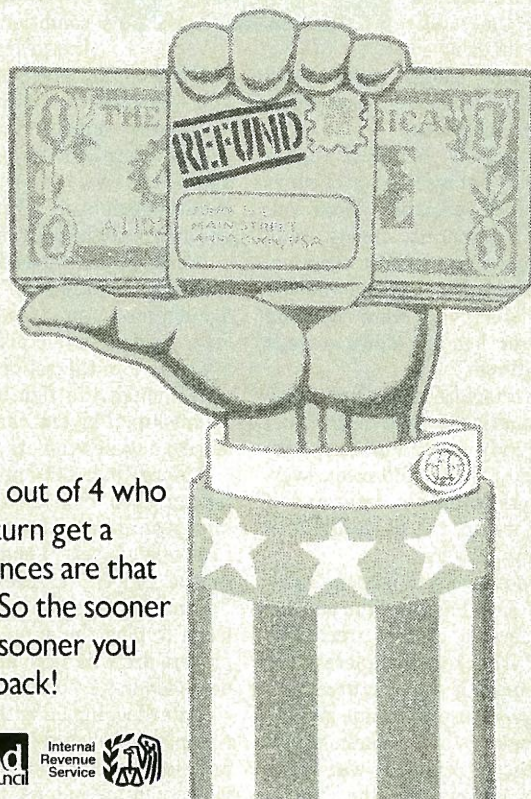
For more information on getting started with Scope, head for the Multiplayer Games Forum (GO MPGAMES) and look for the file RECRUT.HLP in Library 13, "Sniper!"; players also regularly swap notes in Section 13.

In addition, top-ranked player Gary Weintrob (known as "Mendor of the Void")

posts a monthly *Sniper!* newsletter, *Smoke and Rubble*, in Library 13. The newsletter contains tournament results, game updates and tips for new players.

Finally, players can contact *Sniper!* programmer Steve Estvanik via CompuServe User ID number 76703,3046, or by leaving him a message in Section 13 of the Multiplayer Games Forum. He's quick to respond to players' questions and comments.

IT PAYS TO FILE NOW.



Surprise... 3 out of 4 who file a tax return get a refund! Chances are that means you. So the sooner you file the sooner you get money back!

A Public Service of
This Publication &



Internal
Revenue
Service



board equivalents for commands.

To move a soldier with a pop-up menu, for instance, Scope users first press the <F10> key menu. Using the mouse, cursor keys or keyboard, they then select "Move," and press subsequent buttons to choose direction, distance and unit number.

With each action, a keyboard-equivalent command appears at the bottom of the screen. After using the pop-up menu and watching the soldiers move on-screen, players soon learn the abbreviated keyboard commands and thus can maneuver their troops more quickly.

After Bootcamp, newcomers are more prepared for a Supersolo mission and online action against other players.

Programmer Estvanik, known on *Sniper!* as "Yngvi," is a frequent battlefield participant. Although he regularly appears in the top 10 of tournament rankings, other players often beat the programmer at his own game. "Knowing the innards of the program doesn't really help in playing," Estvanik admits.

Players shouldn't worry about winning or losing, however. "The players are really friendly, and they'll answer questions and give hints if people want them," Estvanik says. "For personal interaction, I think this is one of the best games out there."

Free-lance writer R. Andrew Rathbone, based in San Diego, is the author of *The Computer Gamer's Bible*. His CompuServe User ID number is 75300,1565.

Playing with the Programming, Too: Scope's Creator

When Steve Estvanik began programming for a living in the late 1970s, he disliked one part of the job: He never got to meet the people who used his programs. CompuServe has changed that.

"It's one of the joys of online programming," says Estvanik. "With other games, my work's on the market two years after I've stopped programming it. Then, if anybody makes a suggestion, it's impossible to put it into the game."

Sniper! has turned into an ongoing community project of sorts, and the Seattle programmer thrives on feedback from players. "I find it really useful when we have an informal conference on a Saturday night and start kicking ideas around," he says. "Sometimes people won't say anything specific, but they'll spark something in my mind."

As a result, Estvanik keeps a poll online; players regularly vote on proposed features, and he constantly updates the game to meet their needs.

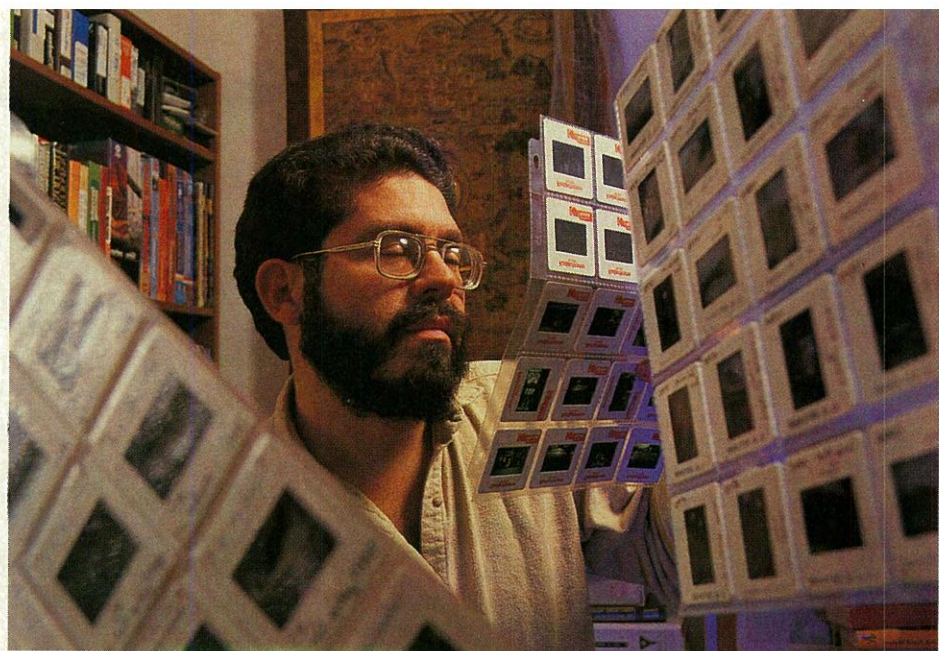
Estvanik, known to *Sniper!* fans as "Yngvi," began designing computer games in 1979. He wrote his first real-time multiplayer game while in college, then graduated to commercial games for CompuServe and Avalon Hill in 1983.

CompuServe members might know him from *Air Traffic Controller* (GO ATCONTROL), his first CompuServe game. Today, however, he spends most of his online time honing the new Scope interface for *Sniper!* His online hints keep the game moving for beginning and advanced players alike.

"First-timers tend to keep their guys low to the ground or out in the open," Estvanik warns. "Those strategies don't work. It's important to get a good defensive position. Go into a building when shots are fired!"

Players also need to realize that they must shoot more than once to be effective. That's part of the game's historical accuracy, Estvanik says.

Besides *Sniper!*, which has proved itself in popularity, Estvanik has written several other games. *Antic*, for example (GO IBM-



Sniper! and other games do what players tell him they should do: Estvanik

NEW, Library 6, "General Fun & Games," file ANTI-CX.ZIP), offers a puzzling network of changing colors in an *Othello*-like scenario.

Estvanik is working on another game, *Green*, that is similar to *Scope*, but instead of shooting, people do things with their feet. "Bad guys are knocking down trees or putting up a parking lot," he says. "Your goal is

PERSONAL BUSINESS

to stop them; you plant trees or bushes. It's a whimsical, ecological game with no direct fighting involved."

"I'm a pacifist myself," says Estvanik. "I don't have anything against war games, but I'd like to write a game where fighting and killing isn't the main point."

—RAR

FAST

TAPCIS is the FASTEST way to access CompuServe and...

- ☆ Automate and simplify your access to forums, libraries, and E-mail.
- ☆ Just one key to send and receive messages and files and log off.
- ☆ All your reading, typing, and thinking offline.
- ☆ B-plus protocol for error-free downloading and uploading.

TAPCIS saves time and money by keeping the connect time to a minimum. We *guarantee* it—try TAPCIS for 90 days! IBM compatibles \$79 and OS/2 PM \$99.



800-872-4768

GO TAPCIS ♦ 74020,10

90-day full money-back guarantee.

GO OLI for more information.

Following are summaries of hardware and software reviews available for reading this month in *Online Today*. To read the complete reviews, use the GO commands listed at the end of each summary.

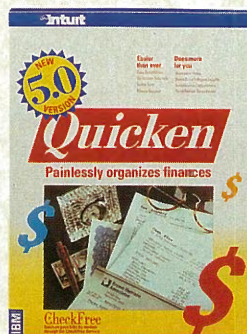
For additional *CompuServe Magazine/Online Today* reviews published during the past two years and illustrations of reviewed products, refer to the key-word-searchable buyer's guides in Libraries 5 and 6 of the OLT Forum (GO OLTFORUM). Use Section 5 of the OLT Forum message board for discussion and questions of the reviews and related products.

Hardware

Simple and Fast Backups

The Jumbo 250 Tape Backup System (Colorado Memory Systems) can back up hard disks in most IBM-compatible computers at speeds up to 8MB a minute and can store a maximum of 250MB of data on a single tape. It features support for Unix and Xenix as well as DOS, and can be used on both network systems and stand-alone computers. Backups can be run interactively or at predetermined times without operator assistance. Reviewer James Moran says the Jumbo's flexibility, reliability and ease of use make it one of the best tape drive values available. To read the review, GO OLT-3735.

Software

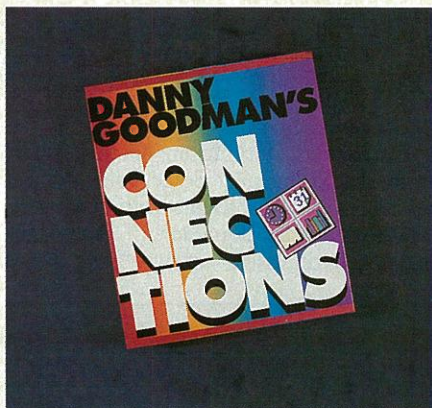


Improved Personal Finances

Quicken 5.0 (Intuit), an improved version of one of the most popular personal financial programs available for IBM computers, includes mouse support, on-screen descriptions of menu choices, a QuickZoom report analyzer and better organization of account categories. Reviewer William J. Lynott says the new features are powerful enough to entice all current users to update. While the program still cannot export data in any common spreadsheet format, he says otherwise it is an excellent package for personal or small-business use. To read the review, GO OLT-3745.

Computerized Payroll

QuickPay (Intuit), a payroll module for the Quicken accounting system for IBM computers, takes advantage of Quicken's flexibility and can be invoked with a single keystroke. It can be used for both hourly and salaried employees, calculates federal and state withholding tax, and can add up to eight additional deductions. Reviewer William J. Lynott calls QuickPay as powerful and flexible as many specialized accounting packages, and says it has the capabilities that a small business needs. To read the review, GO OLT-3755.



Productivity for the Macintosh

Danny Goodman's Connections (Concentrix Technology Inc.), a personal productivity program for Macintosh computers, includes a personal calendar, to-do list, phone directory and related features. Reviewer Anthony Watkins found the program excellent for System 7 users after he got past the awkward installation program. He concludes that Connections is more appropriate for a work group or small company than for an individual user. He calls it a bargain because it includes the latest version of HyperCard. To read the review, GO OLT-3815.

Control Your Computer's Memory

Dynamic Memory Control (Aldersparre & Associates Inc.), a utility for IBM computers that lets users install and remove memory-resident utilities and device drivers without rebooting the computer, includes several utility programs that show the current status of both DOS and high memory. It is compatible with most memory managers. Reviewer Hardin Brothers says the program requires some study to use effectively, but that it is especially useful for anyone who wants to avoid constant modification of configuration files and frequent rebooting. To read the review, GO OLT-3765.

Improved Paint Program

SuperPaint 3.0 (Silicon Beach Software), an advanced paint, drawing and image enhancement program for Macintosh computers, works with both color and black-and-white images. It has many features of advanced image programs, and can import and export graphics in a variety of formats. Reviewer Anthony Watkins calls this an excellent program and says it can do the work of several separate, more expensive software packages. For more information, GO SBSALDFORUM. To read the review, GO OLT-3775.

Shareware Envelope Printer

GRAB Plus (ZPAY Payroll Systems) is a collection of programs for IBM computers to simplify address printing. One program "grabs" an address from any DOS-based word processor and uses it to print an envelope. A similar program does the same in the Windows environment. Two other programs maintain a database of names and addresses and use it to print labels. Reviewer Christy Brothers found the programs easy to use but sometimes limited in ability. However, she concludes that they are well worth their modest registration cost. For more information, visit the IBM Applications Forum (GO IBMAPP). To read the review, GO OLT-3785.

Office Organization

SuperTime (SuperTime Inc.), an office organizer for most networks running on IBM computers, features a number of calendars, a contact directory, a reference library, and a built-in project management module that can help organize projects and other tasks. It also has a complete electronic mail system. Reviewer Franklyn Jones says the program's network support and its many features make it an excellent choice as an electronic office manager for small groups. To read the review, GO OLT-3795.

Analyze Business Loans

Loan Express (ValuSource) is a program for IBM computers that organizes, analyzes and prepares loan requests. Its report writer has "hot links" to financial data files, so it can automatically update requests whenever the data changes. Reviewer James Moran says the program is flawed by weak documentation, but that it can save business owners hours preparing the necessary documentation for commercial loans. To read the review, GO OLT-3805.

Organize Forum Messages

Message Reader 2.0 (RLIB Software), an inexpensive program for IBM computers that can organize message threads down-

loaded from CompuServe forums and CompuServe Mail, will work with any communications software, but is aimed primarily at users of TAPCIS. It can link threads downloaded in different online sessions, perform text searches and queries, and help maintain archives of important messages. Reviewer Christy Brothers says the program is easy to use and understand despite its complex documentation. She calls it worthwhile for anyone who wants to keep up with messages on busy forums. A demonstration version is available for downloading from the TAPCIS Forum (GO TAPCIS). To read the review, GO OLT-3825.

Design Your Own Home

Home (Generic Software Inc.) is an architectural design program for IBM computers. Users can create detailed floor plans including elevations with windows and doors. Reviewer Franklyn Jones says Home is fun to use, but that it is not a toy program. He concludes that it has enough power and features to be useful to anyone considering building a new home or an addition to an existing home. For more information, GO ARETAIL. To read the review, GO OLT-3835.

Tracking the Stars

Distant Suns (Virtual Reality Laboratories Inc.) turns computers running Microsoft Windows into powerful planetariums. The program can plot stars, planets, constellations and deep-space objects such as distant galaxies. It also can display information about and pictures of stellar objects, and project solar eclipses. Reviewer Hardin Brothers says the program is easy and fun to use, and that, with its lively documentation, can help anyone learn about astronomy. To read the review, GO OLT-3845.

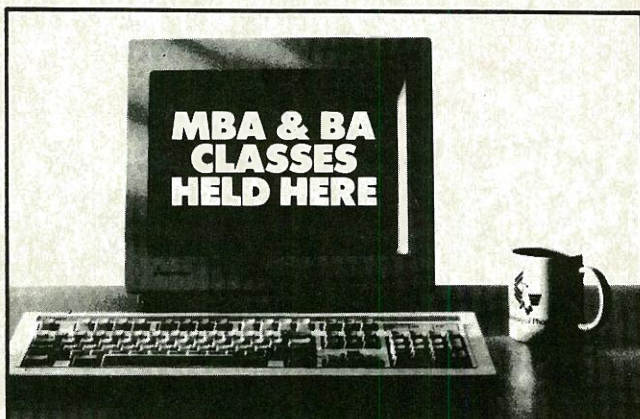
Adapting to the Way You Work

Way You Work (Proteo Technology Corp.) desktop organizer and information manager for IBM computers creates an electronic version of an office, complete with desktop, drawers, folders, in and out baskets, and a wastebasket. Reviewer Franklyn Jones calls the program admirable in its attempt to create a more intuitive computing environment, but says the result is complex and somewhat disorganized. And, he says, the documentation makes learning the system both confusing and tedious. To read the review, GO OLT-5890.



Modular Accounting System

Armor Premier 3.0 (Armor Systems Inc.), an advanced accounting system for IBM computers, is made up of a core of five modules (including general ledger and accounts payable) plus a large number of optional modules. Reviewer Harry Green says Armor is one of the most complete accounting programs available for microcomputers, but it requires an experienced accountant to set up correctly. He concludes that its price and complexity will make it less attractive to small businesses than competing programs. To read the review, GO OLT-5895.



Earn your degree on-line from the University of Phoenix.

- You'll join a learning group of 15 to 20 accomplished working adults from all over the country.
- With a PC compatible and modem, students complete assignments and discuss course related material in an interactive learning environment.
- Curricula designed to integrate academic study with professional responsibilities.
- Faculty of leaders in business and industry.
- Accredited by the North Central Association of Colleges and Schools.

For more information, call
1-800/888-4935



Slow The Wind

You can create calm and beauty where you live, too. Join me and plant a tree. For your free booklet, write: Conservation Trees, The National Arbor Day Foundation, Nebraska City, NE 68410.

 **The National Arbor Day Foundation**

GO PW



OnLine Superstore for Discount Office Products

- Brand Name Office Products at Unbelievable Savings.
- Computer Accessories
- Diskettes and Computer Paper
- Pens from BIC to ZEBRA
- Plus Thousands of Items at Deep Discounts
- Guaranteed Low Prices
- Order Anytime, Day or Night
- Fast, Free Delivery Anywhere in the Continental U.S. for Orders over \$25
- No Hassle Returns
- Toll-free Customer Service 1-800-942-3311
- Free Full Color Catalog

**PENNY WISE
OFFICE PRODUCTS
ALWAYS FREE CONNECT**

To see our entire product selection of thousands of items, access our electronic catalog via our Toll Free Number:

1-800-752-3012

ANSI, VT52, VT100 or VT101 emulation with 8 data bits, 1 stop bit, and no parity.

GO OLI for more information.

GO RX

**FULL SERVICE DISCOUNT
ONLINE PHARMACY**

- Ask the Pharmacist...
 - Free price quotes
 - Drug information
 - Hard to find products
- Thousands of products available including...
 - Family planning
 - Vitamins
 - Contact lens care
- Speedy Service
- Time saving & convenient resource
- Free delivery to all of USA for purchases over \$50
- We ship overseas

**COURT PHARMACY
ONLINE**

**ALWAYS FREE CONNECT
1-800-367-7988**

GO RX

GO OLI for more information.

Book Reviews

Following are summaries of book reviews available for reading this month in *Online Today*. To read the complete reviews, use the GO commands listed at the end of each summary.

PC Magazine Guide to Notebook and Laptop Computers

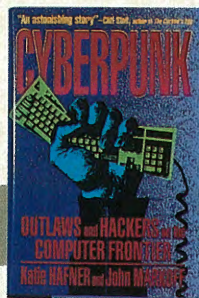
By Bill Howard
Ziff-Davis Press, 1991
416 pages, \$29.95 (softcover)

Packed with information on how to buy a notebook or laptop computer as well as how to use it effectively, this book is one of the best texts reviewer James Moran has seen on the subject. *GO OLT-5020*



Lotus 1-2-3 Step-by-Step
By Judd Robbins
Sams, 1990
611 pages, \$24.95 (softcover)

Calling this book "user-friendly" with its chapter-by-chapter summary of key points, review questions and eye-pleasing graphical design, reviewer Franklyn Jones says it is one of the best books he's seen for novice 1-2-3 users. *GO OLT-5040*



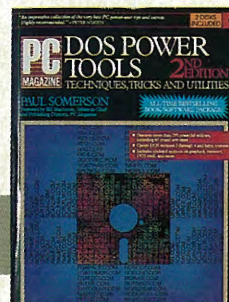
Cyberpunk: Outlaws and Hackers on the Computer Frontier
By Katie Hafner and John Markoff
Simon & Schuster, 1991
368 pages, \$22.95 (hardcover)

The story of "cyberpunks" Kevin Mitnick, "Pengo" and Robert Morris, this book is a fascinating and disturbing look into computer crime and cyberpunk culture. Reviewer John Edwards found it as gripping as most crime novels. *GO OLT-5030*

Real World PageMaker 4: Industrial Strength Techniques (Windows Edition)

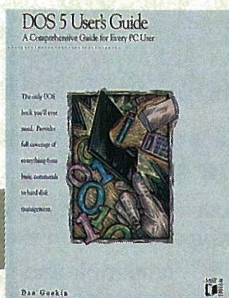
By Jesse Berst, Stephen Roth, Olav Martin Kvern and Scott Dunn
Bantam Computer Books
429 pages, \$24.95 (softcover)

Intended for power PageMaker users, this book helps readers accomplish tasks for which the program wasn't designed. Writing in an irreverent tone that reviewer Brian D. Monahan calls "refreshing," the authors enthusiastically offer unique tips and tricks for using PageMaker more effectively. *GO OLT-5010*



DOS Power Tools: Techniques, Tricks and Utilities (Second Edition)
By Paul Somerson
Bantam Books, 1991
1,069 pages, \$49.95 (softcover)

This book will quickly establish itself as the definitive work on DOS 5.0, asserts reviewer William J. Lynott, who praises the author for his awesome knowledge of DOS and his incisive writing style. *GO OLT-5050*



DOS 5 User's Guide: A Comprehensive Guide for Every PC User
By Dan Gookin
M&T Books, 1991
771 Pages, \$24.95 (softcover)

If you know little or nothing about computers, reviewer Harry Green says this book will serve as a high-tech primer. It is written at a basic level so almost anyone can understand its complex concepts. *GO OLT-5060*

Shoppers Guide

GO KB Save \$ on:
Nikon, Canon, Pentax, Sony,
Hasselblad, Mamiya, Kodak,
Minolta, Olympus, Fuji,
Ilford, Oriental,
Polaroid
etc.



In business over 80 years.
Quantity Discounts.
Phone Orders:
1-504-524-2266


KB

GO CLASSIFIED
For Hundreds of
Listings

CLASSIFIED

REAL ESTATE - AUTOMOBILES
TRAVEL - EMPLOYMENT
SERVICES - ELECTRONICS

GO COINS



Over 3,000 rare
coins listed by date,
denomination and grade!
Offered by coin dealers across the country.
GO COINS and browse the list in the
ARCE.LST file or download ARCE.ZIP.

**THE AMERICAN
RARE COIN EXCHANGE**

A Division of Tangible Information Systems, Inc.
(310)652-3508 Fax: (310)652-5249

GO AQ

SAVE BIG \$\$\$ WHEN BUYING YOUR NEW CAR
OUR REPORTS SHOW YOU DEALER INVOICE VS.
SUGGESTED RETAIL.
THOUSANDS OF SATISFIED CUSTOMERS.

PHONE ORDERS 1-800-992-7404
FAX SERVICE AVAILABLE
AUTOQUOTE-R™

Guidelines to Requesting Information Through OLI

Online Inquiry

Online Inquiry is *CompuServe Magazine's* electronic version of the traditional reader inquiry card. To request additional information about products or services described in *CompuServe Magazine*, simply access CompuServe and type GO OLI at any prompt.

CompuServe Page OLI-1
COMPUSEVE MAGAZINE ADVERTISERS
ONLINE INQUIRY (OLI)

1. OLI Instructions
2. CompuServe Magazine Display Ads
3. Print Edition Reviews
4. Shopper's Guide Mini-Ads

Display Ads

GO OLI-160. Inquiries to this section will be followed by a brief description of the *CompuServe Magazine* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe Page OLI-160
COMPUSEVE MAGAZINE ADVERTISERS/OLI

1. Feb. 1992 Advertisers
2. Jan. 1992 Advertisers
3. Dec. 1991 Advertisers

Shopper's Guide

GO OLI-70 to get information about *CompuServe Magazine's* mini-ad program.

To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.

CompuServe Page OLI-70
SHOPPER'S GUIDE

1. About Shopper's Guide
2. Rates and Information

***Note:** Additional requests during the same session will not require you to re-enter your name and address.

AMERICAN INSTITUTE FOR COMPUTER SCIENCES
offers B.S. and M.S. in Computer Science. All courses
by correspondence. Increase your earning power. For
more information call 1-800-767-2427

**AMERICAN
INSTITUTE
COMPUTER
SCIENCES**

CHADWICK UNIVERSITY offers B.S. and
M.B.A. programs in Business Administration. All
courses by correspondence. Increase your earning
power. For more information call 1-800-767-2423.

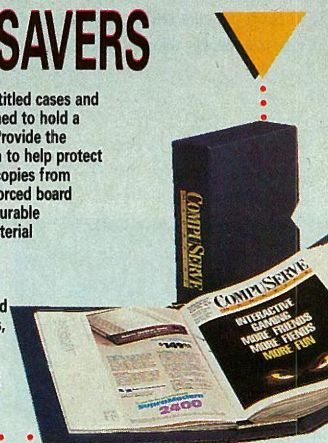
**CHADWICK
UNIVERSITY**

Advertiser's Directory

American Institute	55
AutoVantage	Cover 2
Autoquote-R	55
Barnes & Noble	37
Bose Express Music	5
Court Pharmacy	54
Classifieds	55
Computer Store	23
Discount Shopping	24
Good Earth	9
Hooper International	1
IQuest	48
Information Access	35
K&B Camera	55
Knights of the Sky	28
Money Magazine	27
Official Airline Guides	37, 39, 41, 44
PC Catalog	43
Penny Wise	54
Peterson's	34
Quick & Reilly	34
Shoppers Advantage	21
Small Computer	31
Softdisk	36
Supra	Cover 4
Tangbill	55
Tapcis	51
Thomas Online	25
University of Phoenix	53
Vital Stats	36
Walden Books	Cover 3

FILE SAVERS

Custom-made titled cases and binders, designed to hold a year's issues. Provide the storage system to help protect your valuable copies from damage. Reinforced board covered with durable leather-like material in blue. Title hot-stamped in gold, cases v-notched for easy access, binders have spring to hold individual rods which snap in.



Cases \$7.95 Binders \$9.95

CompuServe Magazine
Jesse Jones Industries, Dept. OLT
499 East Erie Ave., Philadelphia, PA 19134

Enclosed is \$_____ for _____ Cases;

Binders. Add \$1 per case/binder for postage & handling. Outside USA \$2.50 per case/binder (US funds only). PA residents add 6% sales tax.

Print Name _____

Address _____

No P.O. Box Numbers Please

City _____

State/Zip _____

CHARGE ORDERS (Minimum \$15): AM EX, Visa, MC, DC accepted. Send card name, #, Exp. date.

CALL TOLL FREE 7 days, 24 hours
1-800-972-5858

SATISFACTION GUARANTEED

UPDATE



Have a Heart and Send One

Valentine's Day is fast approaching, so don't forget to send a Cupidgram to that special someone. Cupidgrams are personalized CompuServe Mail postal letters with a red Cupid and Cupidgram banner across the top and a return address of Loveland, Colo. Cupidgrams may be sent to anyone within the continental United States for \$2 each. GO GRAMS



Stepping Inside a Virtual Illusion

The Computer Art Forum now has a section dedicated to graphics aspects of virtual reality. Virtual reality describes the concept of immersing the user in data, instead of just looking at a screen. The library includes a VGA virtual reality demo program, and the section allows members to be part of a creative process on the cutting edge of computer technology. GO COMART

The State of New York requires all members with a New York address to pay a 4 percent state sales tax for computer service usage effective January 1992. Your CompuServe charges will include this tax. CompuServe will also start collecting New York local sales tax in March 1992. If your organization is tax exempt, CompuServe will discontinue collection of sales tax upon receipt of a properly executed exemption certificate. Be sure to include your User ID number and name for correct matching. Mail your exemption certificate to: CompuServe Inc. Customer Administration, P.O. Box 20212, Columbus, OH 43220.

New versions of CompuServe software are now available for ordering: Information Manager 2.0 for DOS, Information Manager 1.6 for Macintosh, and CompuServe Navigator version 3.1. GO ORDER

Scan and read the latest news and information about the XVI Winter Olympics in Olympics News Clips. Coverage is comprehensive, from pre-Olympics news through the actual competition (Feb. 8-23). Monitor your favorite amateur athlete, scan the results of your favorite winter sport, or review the medal count. GO OLYMPICS

The TAPCIS automated program for accessing the CompuServe Information Service is now available with an OS/2 Presentation Manager interface. TAPCIS/PM takes full advantage of OS/2's multi-threading capability and Presentation Manager's graphic user interface to make accessing CompuServe Mail and forums easy and cost-effective. GO TAPCIS

During February, use any IQuest SmartSCAN for \$2.50, a savings of 50 percent off the normal \$5 charge. With SmartSCANS, you enter a word or phrase describing your topic to quickly review selected databases for references or articles containing that information. The resulting menu lists the databases, along with the number of articles found in each, allowing you to quickly get to the information you need. All other IQuest charges, including charges for articles retrieved from the SmartSCAN menu, remain in effect. GO IQUEST

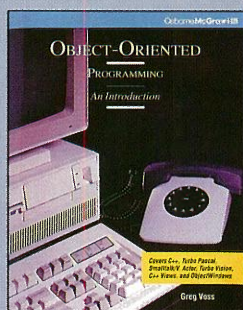
First-time users of Business Database Plus will receive up to a \$5 rebate for surcharges incurred during their first session in February. Use Business Database Plus to find the complete text of articles covering virtually any business topic published in more than 450 city, US and international business and trade publications. GO BUSDB

NEXT MONTH • The Global Economic Shakeout: Big News for Small Business • England's Odd Couple: Hosting the UK Computing Forum • Mutual Funds: How to Make Hay in a Sluggish Economy • Long Island Sounds: Cork-Popping in the New Wine Country • If You Think You're So Smart: Mensa Intelligentsia

GO WB

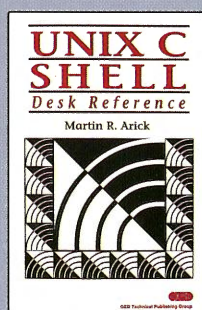
For the Best in Computer Books

From beginning tutorials to advanced texts, the books you want are at your fingertips with WaldenCOMPUTERbooks. **GO WB**



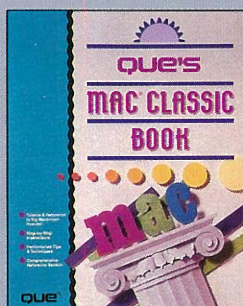
Object-Oriented Programming: An Introduction

An essential text that introduces core concepts of OOP and shows complete working example programs in C++, Turbo Pascal, Actor and Smalltalk. Also covers Turbo Vision, C++ Views and ObjectWindows. By Greg Voss. *Osborne/McGraw-Hill*. \$24.95



UNIX C Shell Desk Reference

Maximize your use of the UNIX C shell with this outstanding tutorial. Covers how the shell works, plus how to manage the UNIX file system, execute command sets, run programs simultaneously and more. By Martin R. Arick. *QED*. \$34.95



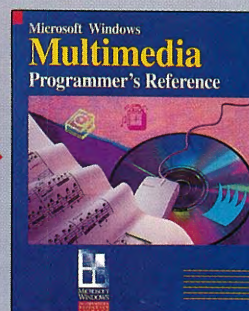
Que's Mac Classic Book

This complete beginner's tutorial and reference takes you inside the Mac Classic so you can get more out of it. Learn to tailor your Mac to suit your needs with complete hardware and software advice. *Que*. \$24.95



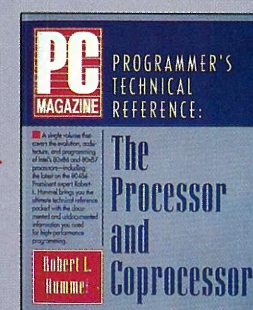
Object-Oriented Programming in Turbo C++

The Waite Group offers step-by-step lessons in the basics of OOP with Turbo C++ and Borland C++, without prior experience with C. Easy-to-follow style and over 200 example programs. By Robert Lafore. *Waite Group Press*. \$26.95



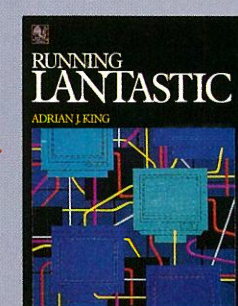
Microsoft Windows Multimedia Programmer's Reference

The definitive summary to the application programming interface for Microsoft Windows with Multimedia. Includes detailed information on functions, messages, data types, data structures, file formats and commands. *Microsoft*. \$27.95



PC Magazine Programmer's Technical Reference: The Processor and Coprocessor

A single, concise reference on Intel's entire family of 80x86 processors and 80x87 coprocessors, for programmers of all languages and skill levels. By Robert L. Hummel. *Ziff-Davis*. \$49.95



Running LANTastic

Learn to better administer, maintain and improve the performance of all versions of LANTastic, including LANTastic for Windows. Realistic tips and tricks help increase your LANTastic productivity. By Adrian J. King. *Bantam*. \$24.95

Books are also available at Waldensoftware stores. Check the Yellow Pages for the store nearest you.

WaldenCOMPUTERbooks

Supra Quality, Supra Prices, Supra

Modems

SupraFAXModem V.32bis
\$399.95 Stand-Alone Retail
\$449.95 IBM Windows Retail
\$479.95 Macintosh Retail

14,400 S/R FAX
14,400 DATA



SupraFAXModem V.32
\$299.95 Stand-Alone Retail
\$349.95 IBM Windows Retail
\$379.95 Macintosh Retail

9600 S/R FAX
9600 DATA



SupraFAXModem Plus
\$219.95 IBM Windows Retail
\$249.95 Macintosh Retail

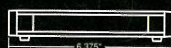
9600 S/R FAX
2400 DATA



Introducing
three great new
data/fax modems from
Supra — the 2400 bps Supra-
FAXModem™ Plus, the 9600 bps
SupraFAXModem V.32, & the 14,400
bps SupraFAXModem V.32bis! All
three modems feature V.42bis &
MNP (2-5, 10) data compression &
error correction, plus Class 1 & 2
fax commands & compatibility with
Group 3 fax machines.

SupraFAXModems for IBM™ PCs
with Windows™
include Winfax™
fax software, &
SupraFAXModems for
Macintosh™ computers include
MicroPhone™ 1.6 (telecom),
FAXstf™, CompuServe
Information Manager™,
& America Online™.

Both Winfax & FAXstf make
sending a fax as easy as printing a
file & offer transmission scheduling,
background transmissions, fax
broadcasting to multiple
destinations, & activity logs.



Supra Corporation

To order, call 1-800-727-8772.

7101 Supra Drive S.W., Albany, OR 97321 USA • 503-967-2410 • FAX: 503-967-2401 • All trademarks belong to their respective companies.

CompuServe Magazine, P.O. Box 20212, Columbus, OH 43220-0212

CHECK
IT OUT! THERE'S NOW AN ONLINE
DIRECTORY OF OVER 10 MILLION
BUSINESSES, INCLUDING THEIR
NAMES, ADDRESSES AND PHONE
NUMBERS. GO YEL FOR MORE INFO.

*****3-DIGIT 479
73730, 2610
PR 2 BOX 65 B
FRANCEVILLE IN 47946-9627

Bulk Rate
U.S. Postage
Paid
CompuServe

